Opasraportti

UniOGS, Graduate School (2014 - 2015)

Coordinators of the Graduate School:

- PhD Titta Kallio-Seppä, Human Sciences phone: 040 725 8888
 e-mail: <u>titta.kallio-seppa@oulu.fi</u> room: KE1154 (Student Center)
 PhD, docent Anthony Heape, Health and Biosciences
- PhD, docent Antiony Heape, Health and Biosciences phone: 040 867 6666
 e-mail: <u>anthony.heape@oulu.fi</u> room: KE1153 (Student Center)
 Dh Minne Oilf orbuith Technology and Natural Opic
- PhD Minna Silfverhuth, Technology and Natural Sciences phone: 040 687 8200
 e-mail: <u>minna.silfverhuth@oulu.fi</u> room: KE1154 (Student Center)

Tutkintorakenteet

Doctor of Philosophy, Physiotherapy

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

046001J: Medicine, thesis, 0 op

Doctor of Philosophy, Physiology

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

046001J: Medicine, thesis, 0 op

Doctor of Philosophy, Geriatrics (medicine)

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

046001J: Medicine, thesis, 0 op

Doctor of Philosophy, Geriatrics (health science)

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

356001J: Health Sciences, thesis, 0 op

Doctor of Philosophy, German Philology

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (vähintään 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op

Doctoral Thesis (enintään 198 op)

696004J: Doctoral Dissertation (German Language and Culture), 0 op

Doctor of Philosophy, Dental prosthetics & clinical physiology

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis

046002J: Dentistry, thesis, 0 op

Doctor of Philosophy, Dental development & orthodontics

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis

046002J: Dentistry, thesis, 0 op

Doctor of Philosophy, History

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (vähintään 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 700447J: Research Plan and Seminar, Seminar (History), 1 op

Doctoral Thesis (enintään 198 op)

700442J: Doctoral dissertation (History), 0 op

Doctor of Philosophy, Nursing

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

356001J: Health Sciences, thesis, 0 op

Doctor of Philosophy, Dermatology & Venereology

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

046001J: Medicine, thesis, 0 op

Doctor of Philosophy, Information Studies

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (vähintään 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 694642J: Research Plan and Seminar, Seminar (Information Studies), 1 op

Doctoral Thesis (enintään 198 op)

850004J: Doctoral dissertation (information Studies), 0 op

Doctor of Philosophy, Caries and Root Treatment

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

046002J: Dentistry, thesis, 0 op

Doctor of Philosophy, Educational Psychology

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

Students without a background in education may be required to take up to 10 credits of bridging studies. Students without a background in education carry out a degree of "Doctor of Philosophy". Students, who have background in education carry out a "Doctor of Philosophy (Education)" degree.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (20 - 26 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 419115J: Research plan and seminar, seminar, 1 op

Field Specific Studies (optional)

Teaching tasks (enintään 6 op)

Depending on the major, a doctoral student may include teaching in his/her degree. In that case, he/she must have followed the course "University pedagogics for doctoral students" (920005J), or an equivalent course, or be able to demonstrate sufficient teaching skills through previous experience (see RPL practices: <u>http://www.oulu.fi/english</u>/studying/supporting-your-studies/recognition-prior-learning-rpl).

Teaching tasks

Doctoral Thesis (vähintään 160 op)

419105J: Doctoral thesis, 0 op

Doctor of Philosophy, Education

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

Students without a background in education may be required to take up to 10 credits of bridging studies. Students without a background in education carry out a degree of "Doctor of Philosophy". Students, who have background in education carry out a "Doctor of Philosophy (Education)" degree.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (20 - 26 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 419115J: Research plan and seminar, seminar, 1 op

Field Specific Studies (optional)

Teaching tasks (enintään 6 op)

Depending on the major, a doctoral student may include teaching in his/her degree. In that case, he/she must have followed the course "University pedagogics for doctoral students" (920005J), or an equivalent course, or be able to demonstrate sufficient teaching skills through previous experience (see RPL practices: <u>http://www.oulu.fi/english</u>/studying/supporting-your-studies/recognition-prior-learning-rpl).

Teaching tasks

Doctoral Thesis (vähintään 160 op)

419105J: Doctoral thesis, 0 op

Doctor of Philosophy, Literature

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (vähintään 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 687170J: Research Plan and Seminar, Seminar (Literature), 1 op

Doctoral Thesis (enintään 198 op)

711104J: Doctoral dissertation (literature), 0 op

Doctor of Philosophy, Surgery

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

046001J: Medicine, thesis, 0 op

Doctor of Philosophy, Clinical Dentistry: Prosthetic Dentistry and Stomatognathic Physiology

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis

046002J: Dentistry, thesis, 0 op

Doctor of Philosophy, Clinical Dentistry: Periodontics

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis

046002J: Dentistry, thesis, 0 op

Doctor of Dental Science, Caries and Root Treatment

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis

046002J: Dentistry, thesis, 0 op

Doctor of Dental Science, Pedodontics

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis

046002J: Dentistry, thesis, 0 op

Doctor of Dental Science, Community Dentistry

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis

046002J: Dentistry, thesis, 0 op

Doctor of Dental Science, Oral & maxillofacial surgery

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis

046002J: Dentistry, thesis, 0 op

Doctor of Philosophy, Clinical Laboratory Science

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

356001J: Health Sciences, thesis, 0 op

Doctor of Philosophy, Ear, Nose & Throat Diseases

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

046001J: Medicine, thesis, 0 op

Doctor of Philosophy, Cultural Anthropology

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (vähintään 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 687239J: Research Plan and Seminar, Seminar (Cultural Anthropology), 1 op

Doctoral Thesis (enintään 198 op)

713104J: Doctoral dissertation (Cultural anthropology), 0 op

Doctor of Philosophy, Paediatrics

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

046001J: Medicine, thesis, 0 op

Doctor of Philosophy, Logopedics

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (vähintään 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 694789J: Research Plan and Seminar, Seminar (Logopedics), 1 op

Doctoral Thesis (enintään 198 op)

739004J: Doctoral Thesis (Logopedics), 0 op

Doctor of Philosophy, Medical Microbiology & Immunology

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

046001J: Medicine, thesis, 0 op

Doctor of Philosophy, Medical Technology

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

046001J: Medicine, thesis, 0 op

Doctor of Philosophy, Geography

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

Students without a background in geography may be required to take up to 10 credits of brigding studies of history, development and the current debate of geography.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (16 - 21 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 793612J: Research Plan and Seminar, seminar, 1 op

Teaching Tasks (enintään 5 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

793611J: Teaching Tasks, 0 - 5 op

Doctoral Thesis (vähintään 180 op)

793607J: Ph.D. thesis in geography, 0 op

Doctor of Philosophy, Music Education

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

Students without a background in education may be required to take up to 10 credits of bridging studies. Students without a background in education carry out a degree of "Doctor of Philosophy". Students, who have background in education carry out a "Doctor of Philosophy (Education)" degree.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (20 - 26 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 419115J: Research plan and seminar, seminar, 1 op

Field Specific Studies (optional)

Teaching tasks (enintään 6 op)

Depending on the major, a doctoral student may include teaching in his/her degree. In that case, he/she must have followed the course "University pedagogics for doctoral students" (920005J), or an equivalent course, or be able to demonstrate sufficient teaching skills through previous experience (see RPL practices: <u>http://www.oulu.fi/english</u>/studying/supporting-your-studies/recognition-prior-learning-rpl).

Teaching tasks

Doctoral Thesis (vähintään 160 op)

419105J: Doctoral thesis, 0 op

Doctor of Philosophy, Neurosurgery

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Doctoral Thesis (0 op)

046001J: Medicine, thesis, 0 op

Doctor of Philosophy, Neurology

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

046001J: Medicine, thesis, 0 op

Doctor of Philosophy, Forensic Medicine

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

046001J: Medicine, thesis, 0 op

Doctor of Philosophy, Pathology

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

046001J: Medicine, thesis, 0 op

Doctor of Philosophy, Pedodontics

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis

046002J: Dentistry, thesis, 0 op

Doctor of Philosophy, Nordic Philology

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (vähintään 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 693682J: Research Plan and Seminar, Seminar (Swedish Language), 1 op

Doctoral Thesis (enintään 198 op)

687004J: Doctoral Dissertation (Swedish Language), 0 op

Doctor of Philosophy, Radiography

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

356001J: Health Sciences, thesis, 0 op

Doctor of Philosophy, Radiology

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

046001J: Medicine, thesis, 0 op

Doctor of Philosophy, Saami Language (North Saami Language or Saami Language of Inari)

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (vähintään 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op

Doctoral Thesis (enintään 198 op)

682009J: Doctoral dissertation (Saami Language), 0 op

Doctor of Philosophy, Ophthalmology

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

046001J: Medicine, thesis, 0 op

Doctor of Philosophy, Internal Medicine

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

046001J: Medicine, thesis, 0 op

Doctor of Philosophy, Finnish Language

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (vähintään 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 694935J: Research Plan and Seminar, Seminar (Finnish Language), 1 op

Doctoral Thesis (enintään 198 op)

680004J: Doctoral dissertation (Finnish Language), 0 op

Doctor of Philosophy, Oral & maxillofacial surgery

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis

046002J: Dentistry, thesis, 0 op

Doctor of Philosophy, Obstetrics & Gynecology

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

046001J: Medicine, thesis, 0 op

Doctor of Philosophy, Oncology & Radiotherapy

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

046001J: Medicine, thesis, 0 op

Doctor of Philosophy, Health Administration Sciences

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

356001J: Health Sciences, thesis, 0 op

Doctor of Philosophy, Scientific Communications

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (vähintään 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 694521J: Research Plan and Seminar, Seminar (Science Communication), 1 op

Doctoral Thesis (enintään 198 op)

694525J: Doctoral dissertatiotn (Science Communication), 0 op

Doctor of Philosophy, Information Processing Science

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (32 - 36 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 816624J: Research Plan and Seminar, seminar, 1 op

Teaching tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies

Teaching activities 0-4 credits (the student must have either formal pedagogy training, or follow a course of a minimum of 2 credits in higher education pedagogy)

Teaching tasks

Doctoral Thesis (vähintään 180 op)

816669J: Doctoral Thesis in Information Processing Science, 0 op

Doctor of Philosophy, Occupational Health (health science)

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

356001J: Health Sciences, thesis, 0 op

Doctor of Philosophy, General Medicine

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

356001J: Health Sciences, thesis, 0 op

Doctor of Philosophy (Education)

Tutkintorakenteen tila: published

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

Students without a background in education may be required to take up to 10 credits of bridging studies. Students without a background in education carry out a degree of "Doctor of Philosophy". Students, who have background in education carry out a "Doctor of Philosophy (Education)" degree.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (20 - 26 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 419115J: Research plan and seminar, seminar, 1 op

Field Specific Studies (optional)

Teaching tasks (enintään 6 op)

Depending on the major, a doctoral student may include teaching in his/her degree. In that case, he/she must have followed the course "University pedagogics for doctoral students" (920005J), or an equivalent course, or be able to demonstrate sufficient teaching skills through previous experience (see RPL practices: <u>http://www.oulu.fi/english</u>/studying/supporting-your-studies/recognition-prior-learning-rpl).

Teaching tasks

Doctoral Thesis (vähintään 160 op)

419105J: Doctoral thesis, 0 op

Doctor of Philosophy (Education), Educational Psychology

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

Students without a background in education may be required to take up to 10 credits of bridging studies. Students without a background in education carry out a degree of "Doctor of Philosophy". Students, who have background in education carry out a "Doctor of Philosophy (Education)" degree.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (20 - 26 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 419115J: Research plan and seminar, seminar, 1 op

Field Specific Studies (optional)

Teaching tasks (enintään 6 op)

Depending on the major, a doctoral student may include teaching in his/her degree. In that case, he/she must have followed the course "University pedagogics for doctoral students" (920005J), or an equivalent course, or be able to demonstrate sufficient teaching skills through previous experience (see RPL practices: <u>http://www.oulu.fi/english</u>/studying/supporting-your-studies/recognition-prior-learning-rpl).

Teaching tasks

Doctoral Thesis (vähintään 160 op)

419105J: Doctoral thesis, 0 op

Doctor of Philosophy (Education), Music Education

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

Students without a background in education may be required to take up to 10 credits of bridging studies. Students without a background in education carry out a degree of "Doctor of Philosophy". Students, who have background in education carry out a "Doctor of Philosophy (Education)" degree.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (20 - 26 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 419115J: Research plan and seminar, seminar, 1 op

Field Specific Studies (optional)

Teaching tasks (enintään 6 op)

Depending on the major, a doctoral student may include teaching in his/her degree. In that case, he/she must have followed the course "University pedagogics for doctoral students" (920005J), or an equivalent course, or be able to demonstrate sufficient teaching skills through previous experience (see RPL practices: <u>http://www.oulu.fi/english</u>/studying/supporting-your-studies/recognition-prior-learning-rpl).

Teaching tasks

Doctoral Thesis (vähintään 160 op)

419105J: Doctoral thesis, 0 op

Doctor of Science (Economics and Business Administration)

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

Students without a background in management or international business may be required to take up to 0-28 credits of bridging studies.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (42 - 46 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 722001J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (vähintään 180 op)

722590J: MAN&ORG, Doctoral Dissertation, 0 op

Doctor of Science, International Business

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

Students without a background in management or international business may be required to take up to 0-28 credits of bridging studies.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (42 - 46 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 722001J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Doctoral Thesis (vähintään 180 op)

722690J: IB, Doctoral Dissertation, 0 op

Doctor of Science, Accounting

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (vähintään 46 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 722001J: Research plan and seminar, seminar, 1 op

Doctoral Thesis (vähintään 180 op)

722190J: ACC, Doctoral Dissertation, 0 op

Doctor of Science, Logistics

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

Students without a background in logistics may be required to take up to 0-33 credits of bridging studies.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (41 - 46 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 722001J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 5 op)

Depending on the major, a doctoral student may include teaching in his/her degree. In that case, he/she must have followed the course "University pedagogics for doctoral students" (920005J), or an equivalent course, or be able to demonstrate sufficient teaching skills through previous experience (see RPL practices: <u>http://www.oulu.fi/english</u>/studying/supporting-your-studies/recognition-prior-learning-rpl).

722004J Teaching Tasks 4 op

Teaching Tasks

Doctoral Thesis (vähintään 180 op)

722790J: LOG, Doctoral dissertation, 0 - 180 op

Doctor of Science, Marketing

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

Students without a background in marketing or logistics may be required to take up to 0-33 credits of bridging studies.

General- and Transferable Skills Studies

Field Specific Studies (41 - 46 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 722001J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 5 op)

Depending on the major, a doctoral student may include teaching in his/her degree. In that case, he/she must have followed the course "University pedagogics for doctoral students" (920005J), or an equivalent course, or be able to demonstrate sufficient teaching skills through previous experience (see RPL practices: <u>http://www.oulu.fi/english</u>/studying/supporting-your-studies/recognition-prior-learning-rpl).

722004J Teaching Tasks 4 op

Teaching Tasks

Doctoral Thesis (vähintään 180 op)

722490J: MAR, Doctoral Dissertation, 0 op

Doctor of Science, Finance

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

The student have to get a course 721339S Ekonometria 6 credits, if it is not included in his/her master's degree.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (vähintään 46 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 722001J: Research plan and seminar, seminar, 1 op

Doctoral Thesis (vähintään 180 op)

722990J: FIN, Doctoral dissertation, 0 op

Doctor of Science, Economics

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (vähintään 46 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 722001J: Research plan and seminar, seminar, 1 op

Doctoral Thesis (vähintään 180 op)

722390J: ECON, Doctoral Dissertation, 0 op

Doctor of Medical Science, Anatomy & Cell Biology

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

046001J: Medicine, thesis, 0 op

Doctor of Medical Science, Arctic Medicine

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

046001J: Medicine, thesis, 0 op

Doctor of Medical Science, Physiotherapy

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

Doctor of Medical Science, Physiology

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

046001J: Medicine, thesis, 0 op

Doctor of Medical Science, Clinical Chemistry

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

046001J: Medicine, thesis, 0 op

Doctor of Medical Science, Ear, Nose & Throat Diseases

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

046001J: Medicine, thesis, 0 op

Doctor of Medical Science, Paediatrics

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

046001J: Medicine, thesis, 0 op

Doctor of Medical Science, Medical Microbiology & Immunology

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

046001J: Medicine, thesis, 0 op

Doctor of Medical Science, Medical Technology

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

046001J: Medicine, thesis, 0 op

Doctor of Medical Science, Neurology

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

046001J: Medicine, thesis, 0 op

Doctor of Medical Science, Forensic Medicine

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

046001J: Medicine, thesis, 0 op

Doctor of Medical Science, Ophthalmology

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

046001J: Medicine, thesis, 0 op

Doctor of Medical Science, Occupational

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

046001J: Medicine, thesis, 0 op

Doctor of Medical Science, General Medicine

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

046001J: Medicine, thesis, 0 op

Doctor of Philosophy, Physics

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

Students without a background in physics may be required to take up to 20 credits of brigding studies.

920005J Basics of University Pedagogy for Doctoral Students -course is compulsory only, if student want to include 920006J Teaching tasks to his studies.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (28 - 36 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 766692J: Research Plan and Seminar, Seminar, 1 op

Teaching tasks (enintään 8 op)

Teaching tasks

Doctoral Thesis (vähintään 180 op)

766602J: Ph.D. Thesis in Physics, 0 op

Doctor of Philosophy, Geophysics

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

Students without a background in physics may be required to take up to 20 credits of brigding studies.

920005J Basics of University Pedagogy for Doctoral Students -course is compulsory only, if student want to include 920006J Teaching tasks to his studies.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (28 - 36 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 766692J: Research Plan and Seminar, Seminar, 1 op

Teaching tasks (enintään 8 op)

Teaching tasks

Doctoral Thesis (vähintään 180 op)

762602J: Ph.D. Thesis in Geophysics, 0 op

Doctor of Philosophy, Theoretical Physics

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

Students without a background in physics may be required to take up to 20 credits of brigding studies.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (28 - 36 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 766692J: Research Plan and Seminar, Seminar, 1 op

Teaching tasks (enintään 8 op)

Teaching tasks

Doctoral Thesis (vähintään 180 op)

763602J: Ph.D. Thesis in Theoretical Physics, 0 op

Doctor of Philosophy, Astronomy

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

Students without a background in physics may be required to take up to 20 credits of brigding studies.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (28 - 36 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 766692J: Research Plan and Seminar, Seminar, 1 op

Teaching tasks (enintään 8 op)

Teaching tasks

Doctoral Thesis (vähintään 180 op)

765602J: Ph.D. Thesis in Astronomy, 0 op

Doctor of Science (Technology), Automotive & Machine Engineering

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (4 - 8 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (32 - 36 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 460023J: Research Plan and Seminar, Seminar, 1 op

Teaching Tasks (enintään 4 op)

Depending on the major, a doctoral student may include teaching in his/her degree. In that case, he/she must have either formal pedagogy training, or follow a course of a minimum of 2 ECTS credits in higher education pedagogy.

Teaching Tasks

Doctoral Thesis (vähintään 180 op)

Doctor of Science (Technology), Machine Diagnostic

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (4 - 8 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (32 - 36 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 460023J: Research Plan and Seminar, Seminar, 1 op

Teaching Tasks (enintään 4 op)

Depending on the major, a doctoral student may include teaching in his/her degree. In that case, he/she must have either formal pedagogy training, or follow a course of a minimum of 2 ECTS credits in higher education pedagogy.

Teaching Tasks

Doctoral Thesis (vähintään 180 op)

460001J: Mechanical Engineering, thesis, 0 op

Doctor of Philosophy, Machine Diagnostic

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (4 - 8 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (32 - 36 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Another Field Specific Studies 28-32 credits.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 460023J: Research Plan and Seminar, Seminar, 1 op

Teaching Tasks (enintään 4 op)

Depending on the major, a doctoral student may include teaching in his/her degree. In that case, he/she must have either formal pedagogy training, or follow a course of a minimum of 2 ECTS credits in higher education pedagogy.

Teaching Tasks

Doctoral Thesis (vähintään 180 op)

460001J: Mechanical Engineering, thesis, 0 op

Doctor of Science (Technology), Electronics Materials and Components

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (4 - 8 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

Students without a background in electronical engineering may be required to take up to 15 credits of bridging studies. The bridging studies will reduce the required field specific studies.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (32 - 36 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 520023J: Research Plan and Seminar, Seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (vähintään 180 op)

520001J: Electrical Engineering, thesis, 0 op

Doctor of Science (Technology), Electronics Design

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (4 - 8 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

Students without a background in electronical engineering may be required to take up to 15 credits of bridging studies. The bridging studies will reduce the required field specific studies.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (32 - 36 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 520023J: Research Plan and Seminar, Seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (vähintään 180 op)

520001J: Electrical Engineering, thesis, 0 op

Doctor of Science (Technology), Photonics

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (4 - 8 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

Students without a background in electronical engineering may be required to take up to 15 credits of bridging studies. The bridging studies will reduce the required field specific studies.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (32 - 36 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 520023J: Research Plan and Seminar, Seminar, 1 op

Teaching Tasks (enintään 4 op)

Depending on the major, a doctoral student may include teaching in his/her degree. In that case, he/she must have either formal pedagogy training, or follow a course of a minimum of 2 ECTS credits in higher education pedagogy (920005J).

Teaching Tasks

Doctoral Thesis (vähintään 180 op)

520001J: Electrical Engineering, thesis, 0 op

Doctor of Philosophy, Communications Engineering

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (4 - 8 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (28 - 36 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Another Field Specific Studies 19-27 credits.

521318S Modern Topics in Telecommunications and Radio Engineering at least 5 credits

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 522023J: Research Plan and Seminar, Seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (vähintään 180 op)

522001J: Telecommunication Engineering, thesis, 0 op

Doctor of Philosophy, Computer Science and Engineering

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (4 - 8 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (32 - 36 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Another Field Specific Studies 28-32 credits.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 521023J: Research Plan and Seminar, Seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (vähintään 180 op)

521001J: Information Engineering, thesis, 0 op

Doctor of Philosophy, Electrical engineering

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (4 - 8 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

Students without a background in electronical engineering may be required to take up to 15 credits of bridging studies. The bridging studies will reduce the required field specific studies.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (32 - 36 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Another Field Specific Studies 28-32 credits.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 520023J: Research Plan and Seminar, Seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (vähintään 180 op)

520001J: Electrical Engineering, thesis, 0 op

Doctor of Philosophy, Technical Mathematics

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (4 - 8 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

Students without a background in electronical engineering may be required to take up to 15 credits of bridging studies. The bridging studies will reduce the required field specific studies.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (32 - 36 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Another Field Specific Studies 28-32 credits.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 520023J: Research Plan and Seminar, Seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (vähintään 180 op)

520001J: Electrical Engineering, thesis, 0 op

Doctor of Philosophy, Industrial Engineering and Management

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (4 - 8 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (32 - 36 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 550023J: Research Plan and Seminar, Seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (180 op)

550001J: Industrial Engineering and Management, thesis, 0 op

Doctor of Philosophy, Environmental Engineering

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (4 - 8 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (32 - 36 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Another Field Specific Studies 28-32 credits.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 480023J: Research Plan and Seminar, Seminar, 1 - 4 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (vähintään 180 op)

480001J: Environmental Engineering, thesis, 0 op

Doctor of Philosophy, Process Engineering

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (4 - 8 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

Field Specific Studies (32 - 36 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Another Field Specific Studies 28-32 credits.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 470023J: Research Plan and Seminar, Seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (vähintään 180 op)

470001J: Process Engineering, thesis, 0 op

Doctor of Philosophy, Machine Design

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (4 - 8 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (32 - 36 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Another Field Specific Studies 28-32 credits.

Field Specific Studies

Teaching Tasks (enintään 4 op)

Depending on the major, a doctoral student may include teaching in his/her degree. In that case, he/she must have either formal pedagogy training, or follow a course of a minimum of 2 ECTS credits in higher education pedagogy.

Teaching Tasks

Doctoral Thesis (vähintään 180 op)

460001J: Mechanical Engineering, thesis, 0 op

Doctor of Philosophy, Materials Engineering

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (4 - 8 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (32 - 36 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Another Field Specific Studies 28-32 credits.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 460023J: Research Plan and Seminar, Seminar, 1 op

Teaching Tasks (enintään 4 op)

Depending on the major, a doctoral student may include teaching in his/her degree. In that case, he/she must have either formal pedagogy training, or follow a course of a minimum of 2 ECTS credits in higher education pedagogy.

Teaching Tasks

Doctoral Thesis (vähintään 180 op)

460001J: Mechanical Engineering, thesis, 0 op

Doctor of Philosophy, Mechatronics

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (4 - 8 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (32 - 36 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Another Field Specific Studies 28-32 credits.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 460023J: Research Plan and Seminar, Seminar, 1 op

Teaching Tasks (enintään 4 op)

Depending on the major, a doctoral student may include teaching in his/her degree. In that case, he/she must have either formal pedagogy training, or follow a course of a minimum of 2 ECTS credits in higher education pedagogy.

Teaching Tasks

Doctoral Thesis (vähintään 180 op)

460001J: Mechanical Engineering, thesis, 0 op

Doctor of Philosophy, Structural Engineering

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

General- and Transferable Skills Studies (4 - 8 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (32 - 36 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Another Field Specific Studies 28-32 credits.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 460023J: Research Plan and Seminar, Seminar, 1 op

Teaching Tasks (enintään 4 op)

Depending on the major, a doctoral student may include teaching in his/her degree. In that case, he/she must have either formal pedagogy training, or follow a course of a minimum of 2 ECTS credits in higher education pedagogy.

Teaching Tasks

Doctoral Thesis (vähintään 180 op)

460001J: Mechanical Engineering, thesis, 0 op

Doctor of Philosophy, Construction Technology

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (4 - 8 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (32 - 36 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Another Field Specific Studies 28-32 credits.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 460023J: Research Plan and Seminar, Seminar, 1 op

Teaching Tasks (enintään 4 op)

Depending on the major, a doctoral student may include teaching in his/her degree. In that case, he/she must have either formal pedagogy training, or follow a course of a minimum of 2 ECTS credits in higher education pedagogy (920005J).

Teaching Tasks

Doctoral Thesis (vähintään 180 op)

460001J: Mechanical Engineering, thesis, 0 op

Doctor of Philosophy, Technical Mechanics

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (4 - 8 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (32 - 36 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Another Field Specific Studies 28-32 credits.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (vähintään 180 op)

460001J: Mechanical Engineering, thesis, 0 op

Doctor of Philosophy, Production Technology

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (4 - 8 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (32 - 36 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Another Field Specific Studies 28-32 credits.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 460023J: Research Plan and Seminar, Seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (vähintään 180 op)

460001J: Mechanical Engineering, thesis, 0 op

Doctor of Philosophy, Mathematics

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

920005J Basics of University Pedagogy for Doctoral Students -course is compulsory only, if student want to include 920006J Teaching tasks to his studies.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (31 - 36 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 800703J: Research Plan and Seminar, Seminar, 1 - 4 op

Teaching tasks (enintään 5 op)

When the student has passed at least 2 credits of university pedagogical studies

Teaching tasks

Doctoral Thesis (vähintään 180 op)

800695J: Doctoral Thesis in Mathematics, 0 op

Doctor of Philosophy, Applied Mathematics

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

920005J Basics of University Pedagogy for Doctoral Students -course is compulsory only, if student want to include 920006J Teaching tasks to his studies.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (31 - 36 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 800703J: Research Plan and Seminar, Seminar, 1 - 4 op

Teaching tasks (enintään 5 op)

When the student has passed at least 2 credits of university pedagogical studies

Teaching tasks

Doctoral Thesis (vähintään 180 op)

801695J: Doctoral Thesis in Applied Mathematics, 0 op

Doctor of Philosophy, Statistics

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (31 - 36 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 800703J: Research Plan and Seminar, Seminar, 1 - 4 op

Teaching tasks (enintään 5 op)

When the student has passed at least 2 credits of university pedagogical studies

Teaching tasks

Doctoral Thesis (vähintään 180 op)

802695J: Doctoral Thesis in Statistics, 0 op

Doctor of Philosophy, Saami Culture

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (vähintään 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 683503J: Research Plan and Seminar, Seminar (Saami Culture), 1 op

Doctoral Thesis (enintään 198 op)

682013J: Doctoral dissertation (Saami Culture), 0 op

Doctor of Medical Science, Oncology & Radiotherapy

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

046001J: Medicine, thesis, 0 op

Doctor of Medical Science, Surgery

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

046001J: Medicine, thesis, 0 op

Doctor of Medical Science, Anaesthesiology and Intensive Care Medicine

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

046001J: Medicine, thesis, 0 op

Doctor of Medical Science, Medical Biochemistry and Molecular Biology

Tutkintorakenteen tila: archived

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

046001J: Medicine, thesis, 0 op

Doctor of Medical Science, Geriatrics

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

046001J: Medicine, thesis, 0 op

Doctor of Medical Science, Internal Medicine

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

Another General- and Transferable Skills Studies,

for example:

046011J Basics of scientific communication, lectures, 1,5 op

046012J Basics of scientific communication, exercise, 1,5 op

046016J English for Medical Conferences and Scientific Writing, 1,5 op

046017J Basics of Medical Information, 1 op

046028J Research planning, 2 op

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

046001J: Medicine, thesis, 0 op

Doctor of Medical Science, Public Health Science

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

046001J: Medicine, thesis, 0 op

Doctor of Philosophy, Public Health Science (medicine)

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Doctoral Thesis (0 op)

046001J: Medicine, thesis, 0 op

Doctor of Philosophy, Community Dentistry

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis

046002J: Dentistry, thesis, 0 op

Doctor of Dental Science, Diagnostics & Oral Mucosa Diseases

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis

046002J: Dentistry, thesis, 0 op

Doctor of Dental Science, Orthodontics

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis

046002J: Dentistry, thesis, 0 op

Doctor of Medical Science, Obstetrics & Gynecology

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

046001J: Medicine, thesis, 0 op

Doctor of Medical Science, Dermatology & Venereology

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

046001J: Medicine, thesis, 0 op

Doctor of Medical Science, Pathology

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

046001J: Medicine, thesis, 0 op

Doctor of Medical Science, Psychiatry

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

046001J: Medicine, thesis, 0 op

Doctor of Medical Science, Radiology

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

046001J: Medicine, thesis, 0 op

Doctor of Dental Science, Clinical Dentistry: Prosthetic Dentistry and Stomatognathic Physiology

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis

046002J: Dentistry, thesis, 0 op

Doctor of Medical Science, Neurosurgery

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

046001J: Medicine, thesis, 0 op

Doctor of Philosophy, Clinical Chemistry

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

046001J: Medicine, thesis, 0 op

Doctor of Dental Science, Dentistry

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis

046002J: Dentistry, thesis, 0 op

Doctor of Philosophy, Child Psychiatry

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

046001J: Medicine, thesis, 0 op

Doctor of Philosophy, Medical Physics

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

046001J: Medicine, thesis, 0 op

Doctor of Medical Science, Medical Physics

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

046001J: Medicine, thesis, 0 op

Doctor of Medical Science, Pharmacology & Toxicology

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

046001J: Medicine, thesis, 0 op

Doctor of Medical Science, Clinical Genetics

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

046001J: Medicine, thesis, 0 op

Doctor of Philosophy, Clinical Genetics

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

046001J: Medicine, thesis, 0 op

Doctor of Dental Science, Clinical Dentistry: Periodontics

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis

046002J: Dentistry, thesis, 0 op

Doctor of Philosophy, Medical Biochemistry and Molecular Biology

Tutkintorakenteen tila: archived

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

046001J: Medicine, thesis, 0 op

Doctor of Philosophy, Geology of the Soil

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 5 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

Students without a background in geology may be required to take up to 15 credits of brigding studies.

920005J Basics of University Pedagogy for Doctoral Students -course is compulsory only, if student want to include 920006J Teaching tasks to his studies.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (24 - 30 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 771608J: Research Plan and Seminar, Seminar, Geosciences, 1 op

Teaching tasks (enintään 6 op)

When the student has passed at least 2 credits of university pedagogical studies

Teaching tasks

Doctoral Thesis (vähintään 180 op)

771603J: Ph. D. thesis, 0 op

Doctor of Philosophy, Geology and Minerology

Tutkintorakenteen tila: published

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 5 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

Students without a background in geology may be required to take up to 15 credits of brigding studies.

920005J Basics of University Pedagogy for Doctoral Students -course is compulsory only, if student want to include 920006J Teaching tasks to his studies.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (24 - 30 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 771608J: Research Plan and Seminar, Seminar, Geosciences, 1 op

Teaching tasks (enintään 6 op)

When the student has passed at least 2 credits of university pedagogical studies

Teaching tasks

Doctoral Thesis (vähintään 180 op)

771603J: Ph. D. thesis, 0 op

Doctor of Philosophy, Architecture

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (4 - 8 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management

General- and Transferable Skills Studies

Field Specific Studies (32 - 36 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree

Another Field Specific Studies 28-32 credits.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 450023J: Research Plan and Seminar, Seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (vähintään 180 op)

450001J: Architecture, thesis, 0 op

Doctor of Science, Architecture

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (4 - 8 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (32 - 36 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (vähintään 180 op)

450001J: Architecture, thesis, 0 op

Doctor of Philosophy, History of Ideas and Science

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (vähintään 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 700122J: Research Plan and Seminar, Seminar (History of Science and Ideas), 1 op

Doctoral Thesis (enintään 198 op)

702104J: Doctoral dissertation (History of Science and Ideas), 0 op

Doctor of Philosophy, Anatomy & Cell Biology

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

046001J: Medicine, thesis, 0 op

Doctor of Philosophy, Anaesthesiology

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

046001J: Medicine, thesis, 0 op

Doctor of Philosophy, Archaeology

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (vähintään 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 687358J: Research Plan and Seminar, Seminar (Archaeology), 1 op

Doctoral Thesis (enintään 198 op)

712004J: Doctoral dissertation (archaeology), 0 op

Doctor of Philosophy, Arctic Medicine (Medicine)

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

046001J: Medicine, thesis, 0 op

Doctor of Philosophy, Arctic Medicine (Health Science)

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

356001J: Health Sciences, thesis, 0 op

Doctor of Philosophy, Automotive & Machine Engineering

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (4 - 8 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (32 - 36 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Another Field Specific Studies 28-32 credits.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op

Teaching Tasks (enintään 4 op)

Depending on the major, a doctoral student may include teaching in his/her degree. In that case, he/she must have either formal pedagogy training, or follow a course of a minimum of 2 ECTS credits in higher education pedagogy.

Teaching Tasks

Doctoral Thesis (vähintään 180 op)

460001J: Mechanical Engineering, thesis, 0 op

Doctor of Philosophy, Biophysics

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management

Students without a background in physics may be required to take up to 20 credits of brigding studies.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (28 - 36 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 766692J: Research Plan and Seminar, Seminar, 1 op

Teaching tasks (enintään 8 op)

Teaching tasks

Doctoral Thesis (vähintään 180 op)

764602J: Ph.D. Thesis in Biophysics, 0 op

Doctor of Philosophy, Biochemistry

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management

Students without a background in biochemistry may be required to take up to 40 credits of bridging studies. These studies will be selected based on the individual background of the student by the supervisor and student and should be the minimum required to give the student sufficient background in biochemistry. The plan for the bridging studies (where necessary) should be accepted by the departmental research planning committee.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (vähintään 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 748617J: Research Plan and Seminar, Seminar, 1 - 12 op

Teaching tasks (enintään 4 op)

Depending on the major, a doctoral student may include teaching in his/her degree. In that case, he/she must have followed the course "University pedagogics for doctoral students" (920005J), or an equivalent course, or be able to demonstrate sufficient teaching skills through previous experience (see RPL practices: <u>http://www.oulu.fi/english</u>/studying/supporting-your-studies/recognition-prior-learning-rpl).

748623J Teaching Tasks 4 credits

Doctoral Thesis (vähintään 180 op)

748615J: Ph.D. Thesis in Biochemistry, 0 - 180 op

Doctor of Philosophy, Diagnostics & Oral Mucosa Diseases

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis

046002J: Dentistry, thesis, 0 op

Doctor of Philosophy, Electronics Materials and Components

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (4 - 8 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

Students without a background in electronical engineering may be required to take up to 15 credits of bridging studies. The bridging studies will reduce the required field specific studies.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (32 - 36 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 520023J: Research Plan and Seminar, Seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (vähintään 180 op)

520001J: Electrical Engineering, thesis, 0 op

Doctor of Philosophy, Electronics Design

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (4 - 8 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

Students without a background in electronical engineering may be required to take up to 15 credits of bridging studies. The bridging studies will reduce the required field specific studies.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (32 - 36 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 520023J: Research Plan and Seminar, Seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (vähintään 180 op)

520001J: Electrical Engineering, thesis, 0 op

Doctor of Philosophy, Animal Ecology

Tutkintorakenteen tila: archived

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (vähintään 26 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 750662J: Research Plan and Seminar, Seminar, 1 - 2 op

Doctoral Thesis (vähintään 180 op)

755617J: Ph.D. thesis in animal ecology, 180 op

Doctor of Philosophy, Animal Physiology

Tutkintorakenteen tila: archived

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (vähintään 26 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 750662J: Research Plan and Seminar, Seminar, 1 - 2 op

Doctoral Thesis (vähintään 180 op)

755619J: Ph.D. thesis in animal physiology, 180 op

Doctor of Philosophy, Genetics

Tutkintorakenteen tila: archived

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (vähintään 26 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 750662J: Research Plan and Seminar, Seminar, 1 - 2 op

Doctoral Thesis (vähintään 180 op)

757609J: Ph.D. thesis in genetics, 180 op

Doctor of Philosophy, Plant Ecology

Tutkintorakenteen tila: archived

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (vähintään 26 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 750662J: Research Plan and Seminar, Seminar, 1 - 2 op

Doctoral Thesis (vähintään 180 op)

756635J: Ph.D. thesis in plant ecology, 180 op

Doctor of Philosophy, Plant Physiology

Tutkintorakenteen tila: archived

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (vähintään 26 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 750662J: Research Plan and Seminar, Seminar, 1 - 2 op

Doctoral Thesis (vähintään 180 op)

756637J: Ph.D. thesis in plant physiology, 180 op

Doctor of Philosophy, English Philology

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (vähintään 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 682367J: Research Plan and Seminar, Seminar (English), 1 op

Doctoral Thesis (enintään 198 op)

692004J: Doctoral dissertation (English), 0 op

Doctor of Philosophy, Inorganic Chemistry

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (vähintään 36 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 780614J: Research Plan and Seminar, seminar, 1 op

Doctoral Thesis (enintään 180 op)

785610J: Ph.D. Thesis in Inorganic Chemistry, 0 op

Doctor of Philosophy, Physical Chemistry

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (vähintään 36 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 780614J: Research Plan and Seminar, seminar, 1 op

Doctoral Thesis (vähintään 180 op)

786610J: Ph.D. Thesis in Physical Chemistry, 0 op

Doctor of Philosophy, Organic Chemistry

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (vähintään 36 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 780614J: Research Plan and Seminar, seminar, 1 op

Doctoral Thesis (vähintään 180 op)

787610J: Ph.D. Thesis in Organic Chemistry, 0 op

Doctor of Philosophy, Structural Chemistry

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (vähintään 36 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 780614J: Research Plan and Seminar, seminar, 1 op

Doctoral Thesis (vähintään 180 op)

788610J: Ph.D. Thesis in Structural Chemistry, 0 op

Doctor of Philosophy, Pharmacology & Toxicology

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

046001J: Medicine, thesis, 0 op

Doctor of Health Science, Occupational Health

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

356001J: Health Sciences, thesis, 0 op

Doctor of Philosophy, Photonics

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (4 - 8 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

Students without a background in electronical engineering may be required to take up to 15 credits of bridging studies. The bridging studies will reduce the required field specific studies.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (32 - 36 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Another Field Specific Studies 28-32 credits.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 520023J: Research Plan and Seminar, Seminar, 1 op

Teaching Tasks (enintään 4 op)

Depending on the major, a doctoral student may include teaching in his/her degree. In that case, he/she must have either formal pedagogy training, or follow a course of a minimum of 2 ECTS credits in higher education pedagogy (920005J).

Teaching Tasks

Doctoral Thesis (vähintään 180 op)

520001J: Electrical Engineering, thesis, 0 op

Doctor of Health Science, Health Administration Sciences

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

356001J: Health Sciences, thesis, 0 op

Doctor of Health Science, Radiography

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

356001J: Health Sciences, thesis, 0 op

Doctor of Health Science, Clinical Laboratory Science

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

356001J: Health Sciences, thesis, 0 op

Doctor of Health Science, Nursing Science

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

356001J: Health Sciences, thesis, 0 op

Doctor of Health Science, Geriatrics

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

356001J: Health Sciences, thesis, 0 op

Doctor of Health Science, Arctic Medicine

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

356001J: Health Sciences, thesis, 0 op

Doctor of Health Science, Public Health Science

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

356001J: Health Sciences, thesis, 0 op

Doctor of Science (Technology), Environmental Engineering

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (4 - 8 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (32 - 36 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 480023J: Research Plan and Seminar, Seminar, 1 - 4 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (vähintään 180 op)

480001J: Environmental Engineering, thesis, 0 op

Doctor of Science (Technology), Production Technology

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (4 - 8 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (32 - 36 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 460023J: Research Plan and Seminar, Seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (vähintään 180 op)

460001J: Mechanical Engineering, thesis, 0 op

Doctor of Science (Technology), Industrial Engineering and Management

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (4 - 8 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (32 - 36 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 550023J: Research Plan and Seminar, Seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (180 op)

550001J: Industrial Engineering and Management, thesis, 0 op

Doctor of Science (Technology), Computer Science and Engineering

Tutkintorakenteen tila: archived

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (4 - 8 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (32 - 36 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Another Field Specific Studies 28-32 credits.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 521023J: Research Plan and Seminar, Seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Doctoral Thesis (vähintään 180 op)

521001J: Information Engineering, thesis, 0 op

Doctor of Science (Technology), Communications Engineering

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (4 - 8 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (28 - 36 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 522023J: Research Plan and Seminar, Seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (vähintään 180 op)

522001J: Telecommunication Engineering, thesis, 0 op

Doctor of Science (Technology), Technical Mechanics

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

General- and Transferable Skills Studies (4 - 8 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (32 - 36 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 460023J: Research Plan and Seminar, Seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (vähintään 180 op)

460001J: Mechanical Engineering, thesis, 0 op

Doctor of Science (Technology), Technical Mathematics

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (4 - 8 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

Students without a background in electronical engineering may be required to take up to 15 credits of bridging studies. The bridging studies will reduce the required field specific studies.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (32 - 36 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 520023J: Research Plan and Seminar, Seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (vähintään 180 op)

520001J: Electrical Engineering, thesis, 0 op

Doctor of Science (Technology), Electrical Engineering

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (4 - 8 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

Students without a background in electronical engineering may be required to take up to 15 credits of bridging studies. The bridging studies will reduce the required field specific studies.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (32 - 36 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 520023J: Research Plan and Seminar, Seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (vähintään 180 op)

520001J: Electrical Engineering, thesis, 0 op

Doctor of Science (Technology), Construction Technology

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (4 - 8 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (32 - 36 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 460023J: Research Plan and Seminar, Seminar, 1 op

Teaching Tasks (enintään 4 op)

Depending on the major, a doctoral student may include teaching in his/her degree. In that case, he/she must have either formal pedagogy training, or follow a course of a minimum of 2 ECTS credits in higher education pedagogy.

Teaching Tasks

Doctoral Thesis (vähintään 180 op)

460001J: Mechanical Engineering, thesis, 0 op

Doctor of Science (Technology), Structural Engineering

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (4 - 8 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (32 - 36 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 460023J: Research Plan and Seminar, Seminar, 1 op

Teaching Tasks (enintään 4 op)

Depending on the major, a doctoral student may include teaching in his/her degree. In that case, he/she must have either formal pedagogy training, or follow a course of a minimum of 2 ECTS credits in higher education pedagogy (920005J).

Teaching Tasks

Doctoral Thesis (vähintään 180 op)

460001J: Mechanical Engineering, thesis, 0 op

Doctor of Science (Technology), Process Engineering

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (4 - 8 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (32 - 36 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 470023J: Research Plan and Seminar, Seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (vähintään 180 op)

470001J: Process Engineering, thesis, 0 op

Doctor of Science (Technology), Mechatronics

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (4 - 8 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (32 - 36 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Another Field Specific Studies 28-32 credits.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op

Teaching Tasks (enintään 4 op)

Depending on the major, a doctoral student may include teaching in his/her degree. In that case, he/she must have either formal pedagogy training, or follow a course of a minimum of 2 ECTS credits in higher education pedagogy.

Teaching Tasks

Doctoral Thesis (vähintään 180 op)

460001J: Mechanical Engineering, thesis, 0 op

Doctor of Science (Technology), Materials Engineering

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (4 - 8 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (32 - 36 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 460023J: Research Plan and Seminar, Seminar, 1 op

Teaching Tasks (enintään 4 op)

Depending on the major, a doctoral student may include teaching in his/her degree. In that case, he/she must have either formal pedagogy training, or follow a course of a minimum of 2 ECTS credits in higher education pedagogy.

Teaching Tasks

Doctoral Thesis (vähintään 180 op)

460001J: Mechanical Engineering, thesis, 0 op

Doctor of Science (Technology), Machine Design

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (4 - 8 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (32 - 36 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 460023J: Research Plan and Seminar, Seminar, 1 op

Teaching Tasks (enintään 4 op)

Depending on the major, a doctoral student may include teaching in his/her degree. In that case, he/she must have either formal pedagogy training, or follow a course of a minimum of 2 ECTS credits in higher education pedagogy.

Teaching Tasks

Doctoral Thesis (vähintään 180 op)

460001J: Mechanical Engineering, thesis, 0 op

Doctor of Philosophy, Psychiatry

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op 920012J: Research Plan and Seminar, Plan, 3 op 046034J: Research plan and seminar, seminar, 1 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

046001J: Medicine, thesis, 0 op

Doctor of Health Science, General Medicine

Tutkintorakenteen tila: published

Lukuvuosi: 2014-15

Lukuvuoden alkamispäivämäärä: 01.08.2014

General- and Transferable Skills Studies (vähintään 4 op)

The objectives of general and transferable skills studies are to support planning and fulfillment of doctoral training, to develop research ethics and to support career management.

General- and Transferable Skills Studies

920007J: Follow-up Group Reporting and meetings, 1 op 920001J: Introduction to Doctoral Training, 1 op 920002J: Scientific Research and Ethics, 2 op

Field Specific Studies (12 - 16 op)

The objectives of field specific studies is to introduce students to the field, to support research and to promote employment after the degree.

Field Specific Studies

920014J: Midterm checkpoint, 0 op

Teaching Tasks (enintään 4 op)

When the student has passed at least 2 credits of university pedagogical studies.

Teaching Tasks

Doctoral Thesis (0 op)

356001J: Health Sciences, thesis, 0 op

Tutkintorakenteisiin kuulumattomat opintokokonaisuudet ja jaksot

722130J: ACC, Major Subject Studies, 0 - 10 op 722131J: ACC, Major Subject Studies, Financial Accounting, 0 - 10 op 722132J: ACC, Major Subject Studies, Management Accounting, 0 - 10 op 722133J: ACC, Major Subject Studies, Special Issue, 0 - 10 op 722100J: ACC, Research Methodology, 0 - 10 op 722101J: ACC, Research Methodology, Research Methods, 0 - 10 op 046020J: Analysing statistical data by the R language, 1,5 op 046014J: Basic statistical methods in medicine, 3 op 046017J: Basics of Medical Information, 1 op 920005J: Basics of University Pedagogy for Doctoral Students, 2 op 046029J: Basics of research in clinical epidemiology, 3,3 op 046012J: Basics of scientific communication, exercise, 1,5 op 046011J: Basics of scientific communication, lectures, 1,5 op 920011J: Communicating Science to the Media, General Public and Decision Makers, 1 op 046018J: Computer-based statistical processing of material, 1 op 520020J: Conference, 0,5 - 2 op 521020J: Conference, 0,5 - 2 op 460020J: Conference, 0,5 - 2 op 722002J: Conference, 0,5 - 2 op 419112J: Conference, 0,5 - 2 op 046031J: Conference, 0.5 - 4 op 450020J: Conference, 0,5 - 2 op 480020J: Conference, 0,5 - 2 op 470020J: Conference, 0,5 - 2 op 694932J: Conference (Finnish Language), 0,5 - 2 op 693457J: Conference (German Language and Culture), 0,5 - 2 op 694639J: Conference (Information Studies), 0,5 - 2 op 694786J: Conference (Logopedics), 0,5 - 2 op 693679J: Conference (Swedish Language), 0,5 - 2 op 722331J: ECON, Major Subject Studies, Macroeconomic Theory, 0 - 10 op 722330J: ECON, Major Subject Studies, Microeconomic Theory, 0 - 10 op 722332J: ECON, Major Subject Studies, Special Issues, 0 - 10 op 722300J: ECON, Research Methodology, Methodology and History of Economic Thought, 0 - 10 op 722301J: ECON, Research Methodology, Research Methods, 0 - 10 op 520010J: Electrical Engineering, postgraduate course, 0 - 59,5 op 520011J: Electrical Engineering, postgraduate literature and written exam, 0 - 34 op 046016J: English for Medical Conferences and Scientific Writing, 1,5 op 722930J: FIN, Major Subject Studies, 0 op 722901J: FIN, Research Methodology, Dissertation Analysis, 0 - 10 op

722900J: FIN, Research Methodology, Methodology, 0 - 10 op 722902J: FIN, Research Methodology, Research Methods, 0 - 10 op 046019J: Faculty of Medicine Science Day, 0,3 - 1 op 419116J: Field Specific Content, 1 - 22 op 419117J: Field Specific Methodology, 1 - 22 op 722630J: IB, Major Subject Studies, 0 - 10 op 722631J: IB, Major Subject Studies, Specialisation Studies in International Business, 0 - 10 op 920003J: Information skills for doctoral students, 2 op 722730J: LOG, Major Subject Studies, Logistics Theory and History, 0 - 10 op 722732J: LOG, Major Subject Studies, Special Issue in Logistics, 0 - 10 op 722731J: LOG, Major Subject Studies, Specialisation Studies in Logistics, 0 - 10 op 722530J: MAN&ORG, Major Subject Studies, Management Theory and History, 0 - 10 op 722532J: MAN&ORG, Major Subject Studies, Special Issues in Management and Organization, 0 - 10 op 722531J: MAN&ORG, Major Subject Studies, Specialisation Studies in Management and Organization, 0 - 10 op 722430J: MAR, Major subject studies, Marketing Theory and History, 0 - 10 op 722432J: MAR, Major subject studies, Special Issues in Marketing, 0 - 10 op 722431J: MAR, Major subject studies, Specialisation Studies in Marketing, 0 - 10 op 722400J: MAR, Research Methodology, 0 - 10 op 450021J: Research Visit, 0,5 - 2 op 460021J: Research Visit, 0,5 - 2 op 470021J: Research Visit, 0,5 - 2 op 419113J: Research Visit, 0,5 - 2 op 046032J: Research Visit, 0,5 - 10 op 722003J: Research Visit, 0,5 - 2 op 480021J: Research Visit, 0,5 - 2 op 521021J: Research Visit, 0,5 - 2 op 520021J: Research Visit, 0,5 - 2 op 046028J: Research planning, 2 op 920010J: Scientific Communication, 0,5 op 480022J: Teaching Tasks, 0 - 5 op 470022J: Teaching Tasks, 0 - 5 op 521022J: Teaching Tasks, 4 op 520022J: Teaching Tasks, 4 op 450022J: Teaching Tasks, 4 op 460022J: Teaching Tasks, 0 - 5 op 722004J: Teaching Tasks, 0 - 4 op

Opintojaksojen kuvaukset

Tutkintorakenteisiin kuuluvien opintokohteiden kuvaukset

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing:

Once per year

Learning outcomes:

The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training.

Course objectives:

Aiming to reflect own progress and plans of the doctoral training.

Aiming to provide supplementary support for the doctoral training.

Contents:

Written and oral presentation reports and plans.

Learning activities and teaching methods:

Annual meetings.

Assessment methods and criteria:

Evaluation of progress reports and plans. Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass / fail **Person responsible:** Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> criteria at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies **Laji:** Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies ECTS Credits: 3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Medicine Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046001J: Medicine, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Medicine Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish **ECTS Credits:** 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail

Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies **ECTS Credits:**

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Faculty of Medicine

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

046001J: Medicine, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Medicine Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit

Language of instruction:

English

Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Jarmo Pulkkinen Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits Language of instruction: English/Finnish Timing: The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status: Obligatory "field-specific" studies ECTS Credits: 3 credits Language of instruction: English (or other, when appropriate) Timing: All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Faculty of Medicine

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046001J: Medicine, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Medicine Arvostelu: suor (pass), oiv (excellent), khy (excellent) Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -**Opiskelumuoto:** Post-graduate Studies Laii: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish **ECTS Credits:** 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits Language of instruction: English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status: Obligatory "field-specific" studies ECTS Credits: 3 credits Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Faculty of Medicine

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

356001J: Health Sciences, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English

Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction: English/Finnish

Timina:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies

ECTS Credits:

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee. The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student. Read more about assessment criteria at the University of Oulu webpage. **Grading:** pass / fail **Person responsible:** Supervisor, follow-up group and doctoral training committee

693460J: Research Plan and Seminar, Seminar (German Language and Culture), 1 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Humanities Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

696004J: Doctoral Dissertation (German Language and Culture), 0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Faculty of Humanities Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing: The course is held once in t

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions .

Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:**

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies ECTS Credits: 3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Medicine Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046002J: Dentistry, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -**Opiskelumuoto:** Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish **ECTS Credits:** 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits:

1 ECTS credit

Language of instruction:

English

Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Jarmo Pulkkinen Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction: English/Finnish

Timina:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status: Obligatory "field-specific" studies ECTS Credits: 3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Faculty of Medicine

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046002J: Dentistry, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training. **Learning outcomes:**

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits Language of instruction: English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status: Obligatory "field-specific" studies ECTS Credits: 3 credits Language of instruction: English (or other, when appropriate) Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

700447J: Research Plan and Seminar, Seminar (History), 1 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Faculty of Humanities

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

700442J: Doctoral dissertation (History), 0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Faculty of Humanities Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English

Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction: English/Finnish

Timina:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies

ECTS Credits:

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee. The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student. Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass / fail **Person responsible:** Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Medicine Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

356001J: Health Sciences, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing: The course is held once in the

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions .

Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:**

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies ECTS Credits: 3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Medicine Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046001J: Medicine, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Medicine Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -**Opiskelumuoto:** Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible:

Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits:

1 ECTS credit

Language of instruction:

English

Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions .

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Jarmo Pulkkinen

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies

ECTS Credits:

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

694642J: Research Plan and Seminar, Seminar (Information Studies), 1 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Faculty of Humanities

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

850004J: Doctoral dissertation (information Studies), 0 op

Opiskelumuoto: Post-graduate Studies

Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Faculty of Humanities Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -**Opiskelumuoto:** Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish **ECTS Credits:** 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing: The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits Language of instruction: English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status: Obligatory "field-specific" studies ECTS Credits: 3 credits Language of instruction: English (or other, when appropriate) Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Faculty of Medicine

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046002J: Dentistry, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English

Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction: English/Finnish

Timina:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies

ECTS Credits:

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee. The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student. Read more about assessment criteria at the University of Oulu webpage. **Grading:** pass / fail **Person responsible:** Supervisor, follow-up group and doctoral training committee

419115J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -**Opiskelumuoto:** Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Education Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op Voidaan suorittaa useasti: Kyllä **ECTS Credits:** 1 ECTS / 27 hours of work Language of instruction: Finnish or English, depending on the seminar Timing: During the next calendar year following the acceptance of Doctoral Training Plan. Learning outcomes: Upon completion of the course, the student is able to present his/her research plan in public. Contents: The theme of the student's PhD thesis. Mode of delivery: Independent work. Learning activities and teaching methods: Public seminar. Target group: PhD students Prerequisites and co-requisites: No

Recommended or required reading: No specific materials. Assessment methods and criteria: Presenting a research plan. Grading: pass/fail Person responsible: Dean of Research Working life cooperation: No

419105J: Doctoral thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Faculty of Education Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies

. Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits:

1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing: The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training. Learning outcomes: After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits Language of instruction: English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status: Obligatory "field-specific" studies ECTS Credits: 3 credits Language of instruction: English (or other, when appropriate) Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

419115J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Faculty of Education

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Voidaan suorittaa useasti: Kyllä

ECTS Credits:

1 ECTS / 27 hours of work Language of instruction: Finnish or English, depending on the seminar Timing: During the next calendar year following the acceptance of Doctoral Training Plan. Learning outcomes: Upon completion of the course, the student is able to present his/her research plan in public. Contents: The theme of the student's PhD thesis.

Mode of delivery: Independent work. Learning activities and teaching methods: Public seminar. Target group: PhD students Prerequisites and co-requisites: No Recommended or required reading: No specific materials. Assessment methods and criteria: Presenting a research plan. Grading: pass/fail Person responsible: Dean of Research Working life cooperation: No

419105J: Doctoral thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Faculty of Education Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits:

1 ECTS credit

Language of instruction:

English

Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Jarmo Pulkkinen Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction: English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status: Obligatory "field-specific" studies ECTS Credits: 3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

687170J: Research Plan and Seminar, Seminar (Literature), 1 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Faculty of Humanities

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

711104J: Doctoral dissertation (literature), 0 op

Opiskelumuoto: Post-graduate Studies **Laji:** Defence of the Ph. D. thesis **Vastuuyksikkö:** Faculty of Humanities Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training. **Learning outcomes:**

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits Language of instruction: English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status: Obligatory "field-specific" studies ECTS Credits: 3 credits Language of instruction: English (or other, when appropriate) Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Faculty of Medicine

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046001J: Medicine, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Medicine Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English

Timing: The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition;

transportation; sport activities; Student associations; Student cards; Grants and loans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.
Learning activities and teaching methods:
obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h.
Prerequisites and co-requisites:
The student must have been admitted to the University of Oulu Graduate School.
Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -**Opiskelumuoto:** Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies ECTS Credits:

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Followup Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee. The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student. Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:**

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Medicine Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046002J: Dentistry, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. **Learning activities and teaching methods:** Annual meetings. **Assessment methods and criteria:** Evaluation of progress reports and plans. Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass / fail **Person responsible:** Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions .

Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies **ECTS Credits:**

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Medicine Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046002J: Dentistry, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -**Opiskelumuoto:** Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail **Opintokohteen kielet:** Finnish ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions .

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Obligatory "field-specific" studies **ECTS Credits:**

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Faculty of Medicine

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046002J: Dentistry, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -**Opiskelumuoto:** Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish **ECTS Credits:** 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing: The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and loans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Jarmo Pulkkinen Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits Language of instruction: English/Finnish Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research. **Contents:**

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods: General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status: Obligatory "field-specific" studies ECTS Credits: 3 credits Language of instruction: English (or other, when appropriate) Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement. **Learning outcomes:**

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Faculty of Medicine

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046002J: Dentistry, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits:

1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing: The course is held once in the

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and loans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria: Participation in lectures and discussions . Read more about assessment criteria at the University of Oulu webpage. Grading: pass/fail Person responsible: Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits Language of instruction: English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for responsible conduct of research by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about assessment criteria at the University of Oulu webpage. Grading: pass/fail Person responsible: Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01 08 2013 -**Opiskelumuoto:** Post-graduate Studies

Laii: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies **ECTS Credits:**

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second vear.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Followup Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Faculty of Medicine

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046002J: Dentistry, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. **Learning activities and teaching methods:** Annual meetings. **Assessment methods and criteria:** Evaluation of progress reports and plans. Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass / fail **Person responsible:**

Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English

ECTS Credits:

1 ECTS credit

Language of instruction: English

Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria: Participation in lectures and discussions .

Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies

ECTS Credits:

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-

up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about <u>assessment criteria</u> at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Medicine Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046002J: Dentistry, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -**Opiskelumuoto:** Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish **ECTS Credits:** 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions .

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet:

Status:

Obligatory "field-specific" studies **ECTS Credits:**

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Faculty of Medicine

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

356001J: Health Sciences, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS. 920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English

Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction: English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible: Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status: Obligatory "field-specific" studies ECTS Credits: 3 credits Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement. **Learning outcomes:**

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Faculty of Medicine

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046001J: Medicine, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Medicine Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits:

1 ECTS

Language of instruction:

Language of meeting as appropriate, progress reports in English or Finnish.

Timing:

Once per year

Learning outcomes:

The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. **Learning activities and teaching methods:** Annual meetings. **Assessment methods and criteria:** Evaluation of progress reports and plans.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing: The course is held once in the

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate

School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and loans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Jarmo Pulkkinen Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for responsible conduct of research by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about assessment criteria at the University of Oulu webpage.

Grading: pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies **ECTS Credits:**

3 credits

Language of instruction:

English (or other, when appropriate)

Timina:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second vear.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

687239J: Research Plan and Seminar, Seminar (Cultural Anthropology), 1 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Humanities Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

713104J: Doctoral dissertation (Cultural anthropology), 0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Faculty of Humanities Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish.

Timing:

Once per year

Learning outcomes:

The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. **Learning activities and teaching methods:** Annual meetings. **Assessment methods and criteria:** Evaluation of progress reports and plans. Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass / fail

Person responsible:

Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and loans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies **ECTS Credits:**

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Medicine Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046001J: Medicine, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Medicine Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading:

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits:

1 ECTS credit

Language of instruction:

English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies **ECTS Credits:**

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

694789J: Research Plan and Seminar, Seminar (Logopedics), 1 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Faculty of Humanities

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

739004J: Doctoral Thesis (Logopedics), 0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Faculty of Humanities Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laii: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish **ECTS Credits:** 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS. 920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English

Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions .

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass/fail **Person responsible:**

Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Jarmo Pulkkinen Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits Language of instruction: English/Finnish Timing: The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status: Obligatory "field-specific" studies ECTS Credits: 3 credits Language of instruction: English (or other, when appropriate) Timing: All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Faculty of Medicine

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046001J: Medicine, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Medicine Arvostelu: suor (pass), oiv (excellent), khy (excellent) Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laii: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish **ECTS Credits:** 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits Language of instruction: English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status: Obligatory "field-specific" studies ECTS Credits: 3 credits Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Faculty of Medicine

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046001J: Medicine, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Medicine Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English

Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition;

transportation; sport activities; Student associations; Student cards; Grants and loans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.
 Learning activities and teaching methods:
 obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h.
 Prerequisites and co-requisites:
 The student must have been admitted to the University of Oulu Graduate School.
 Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -**Opiskelumuoto:** Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies ECTS Credits:

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Followup Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee. The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student. Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

793612J: Research Plan and Seminar, seminar, 1 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

793611J: Teaching Tasks, 0 - 5 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

793607J: Ph.D. thesis in geography, 0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 1 FCTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings.

Assessment methods and criteria: Evaluation of progress reports and plans. Read more about <u>assessment criteria</u> at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English

Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School. **Recommended optional programme components:**

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria: Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. Grading: pass/fail Person responsible: Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies **ECTS Credits:**

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student. Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

419115J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Education Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op Voidaan suorittaa useasti: Kyllä ECTS Credits: 1 ECTS / 27 hours of work Language of instruction:

Language of instruction: Finnish or English, depending on the seminar Timing: During the next calendar year following the acceptance of Doctoral Training Plan. Learning outcomes: Upon completion of the course, the student is able to present his/her research plan in public. Contents:

The theme of the student's PhD thesis.

Mode of delivery: Independent work. Learning activities and teaching methods: Public seminar. Target group: PhD students Prerequisites and co-requisites: No **Recommended or required reading:** No specific materials. Assessment methods and criteria: Presenting a research plan. Grading: pass/fail Person responsible: Dean of Research Working life cooperation: No

419105J: Doctoral thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Faculty of Education Arvostelu: suor (pass), oiv (excellent), khy (excellent) Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -**Opiskelumuoto:** Post-graduate Studies Laii: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish **ECTS Credits:** 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits Language of instruction: English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status: Obligatory "field-specific" studies ECTS Credits: 3 credits Language of instruction:

English (or other, when appropriate) **Timing:**

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Faculty of Medicine

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046001J: Medicine, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Medicine Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition;

transportation; sport activities; Student associations; Student cards; Grants and loans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.
 Learning activities and teaching methods:
 obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h.
 Prerequisites and co-requisites:
 The student must have been admitted to the University of Oulu Graduate School.
 Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -**Opiskelumuoto:** Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies ECTS Credits:

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Followup Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee. The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Medicine Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046001J: Medicine, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Medicine Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish ECTS Credits: 1 ECTS Language of instruction:

Language of meeting as appropriate, progress reports in English or Finnish. **Timing:** Once per year **Learning outcomes:** The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. **Learning activities and teaching methods:** Annual meetings. **Assessment methods and criteria:** Evaluation of progress reports and plans. Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass / fail **Person responsible:** Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits:

- 1 ECTS credit Language of instruction:
- English
- Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:**

Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction: English/Finnish

Timina:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies

ECTS Credits:

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Medicine Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046001J: Medicine, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Medicine Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish **ECTS Credits:** 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions .

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet:

Status:

Obligatory "field-specific" studies **ECTS Credits:**

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Faculty of Medicine

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046001J: Medicine, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Medicine Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -**Opiskelumuoto:** Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish **ECTS Credits:** 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction:

English

Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits Language of instruction: English/Finnish Timing: The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies. Learning outcomes: After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status: Obligatory "field-specific" studies ECTS Credits: 3 credits Language of instruction: English (or other, when appropriate) Timing: All full-time students whose doctoral study rights started or

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Followup Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Faculty of Medicine

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046002J: Dentistry, thesis, 0 op

Voimassaolo: 01.08.2005 -**Opiskelumuoto:** Post-graduate Studies Laji: Defence of the Ph. D. thesis Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -**Opiskelumuoto:** Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish **ECTS Credits:** 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the

doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading: Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction: English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for responsible conduct of research by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about assessment criteria at the University of Oulu webpage.

Grading: pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -**Opiskelumuoto:** Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies **ECTS Credits:**

3 credits

Language of instruction:

English (or other, when appropriate)

Timina:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second vear.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

693682J: Research Plan and Seminar, Seminar (Swedish Language), 1 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Humanities Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

687004J: Doctoral Dissertation (Swedish Language), 0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Faculty of Humanities Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish.

Timing:

Once per year

Learning outcomes:

The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. **Learning activities and teaching methods:** Annual meetings. **Assessment methods and criteria:** Evaluation of progress reports and plans. Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass / fail

Person responsible:

Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and loans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies **ECTS Credits:**

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Medicine Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

356001J: Health Sciences, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish **ECTS Credits:** 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail

Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies **ECTS Credits:**

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Faculty of Medicine

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

046001J: Medicine, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Medicine Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit

Language of instruction:

English

Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Jarmo Pulkkinen Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits Language of instruction: English/Finnish Timing: The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status: Obligatory "field-specific" studies ECTS Credits: 3 credits Language of instruction: English (or other, when appropriate) Timing: All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

682009J: Doctoral dissertation (Saami Language), 0 op

Opiskelumuoto: Post-graduate Studies

Laji: Defence of the Ph. D. thesis

Vastuuyksikkö: Giellagas Institute for Saami Studies

Arvostelu: suor (pass), oiv (excellent), khy (excellent)

Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS

Language of instruction:

Language of meeting as appropriate, progress reports in English or Finnish. **Timing:**

Once per year

Learning outcomes:

The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives:

Aiming to reflect own progress and plans of the doctoral training.

Aiming to provide supplementary support for the doctoral training.

Contents:

Written and oral presentation reports and plans.

Learning activities and teaching methods:

Annual meetings.

Assessment methods and criteria: Evaluation of progress reports and plans. Read more about <u>assessment criteria</u> at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing: The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School. **Recommended optional programme components:**

Recommended or required reading: Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria: Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. Grading: pass/fail Person responsible: Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies

ECTS Credits:

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass / fail **Person responsible:** Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Medicine Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046001J: Medicine, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Medicine Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish **ECTS Credits:** 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings.

Assessment methods and criteria:

Evaluation of progress reports and plans. Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass / fail **Person responsible:** Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions .

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies

ECTS Credits:

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Faculty of Medicine

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046001J: Medicine, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Medicine Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish **ECTS Credits:** 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry **Opintokohteen kielet:** English

ECTS Credits:

1 ECTS credit

Language of instruction:

English

Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Jarmo Pulkkinen Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-01 Research Plan and Seminar, Research Plan 3.0 op Status: Obligatory "field-specific" studies ECTS Credits: 3 credits

Language of instruction: English (or other, when appropriate) Timing: All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

694935J: Research Plan and Seminar, Seminar (Finnish Language), 1 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Humanities Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

680004J: Doctoral dissertation (Finnish Language), 0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Faculty of Humanities Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish Voimassaolo: 01.08.2012 -

920007J: Follow-up Group Reporting and meetings, 1 op

Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail **Opintokohteen kielet:** Finnish ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions .

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass/fail Person responsible:

Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits Language of instruction: English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status: Obligatory "field-specific" studies ECTS Credits: 3 credits Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Faculty of Medicine

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046002J: Dentistry, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English

Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction: English/Finnish

Timina:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies

ECTS Credits:

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee. The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student. Read more about assessment criteria at the University of Oulu webpage. **Grading:** pass / fail **Person responsible:** Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Medicine Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op Ei opintojaksokuvauksia.

046001J: Medicine, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Medicine Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training.

Contents:

Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit

Language of instruction:

English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions *.* Read more about <u>assessment criteria</u> at the University of Oulu webpage.

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies

ECTS Credits:

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -

Opiskelumuoto: Post-graduate StudiesLaji: CourseVastuuyksikkö: Faculty of MedicineArvostelu: 1 - 5, pass, failOpintokohteen kielet: FinnishLeikkaavuudet:920004J-02Research Plan and Seminar, seminar1.0 op

Ei opintojaksokuvauksia.

046001J: Medicine, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Medicine Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -**Opiskelumuoto:** Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail **Opintokohteen kielet:** Finnish ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions .

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Obligatory "field-specific" studies **ECTS Credits:**

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Faculty of Medicine

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

356001J: Health Sciences, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -**Opiskelumuoto:** Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish **ECTS Credits:** 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing: The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and loans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Jarmo Pulkkinen Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits Language of instruction: English/Finnish Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research. **Contents:**

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods: General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status: Obligatory "field-specific" studies ECTS Credits: 3 credits Language of instruction: English (or other, when appropriate) Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement. **Learning outcomes:**

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

694521J: Research Plan and Seminar, Seminar (Science Communication), 1 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Faculty of Humanities

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

694525J: Doctoral dissertatiotn (Science Communication), 0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Faculty of Humanities Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits:

1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing: The course is held once in the

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and loans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria: Participation in lectures and discussions . Read more about assessment criteria at the University of Oulu webpage. Grading: pass/fail Person responsible: Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits Language of instruction: English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for responsible conduct of research by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about assessment criteria at the University of Oulu webpage. Grading: pass/fail Person responsible: Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01 08 2013 -

Opiskelumuoto: Post-graduate Studies Laii: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies **ECTS Credits:**

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Followup Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

816624J: Research Plan and Seminar, seminar, 1 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Department of Information Processing Science

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

816669J: Doctoral Thesis in Information Processing Science, 0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Department of Information Processing Science Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. **Learning activities and teaching methods:** Annual meetings. **Assessment methods and criteria:** Evaluation of progress reports and plans. Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass / fail **Person responsible:**

Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English

ECTS Credits:

1 ECTS credit

Language of instruction: English

Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria: Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. Grading:

pass/fail Person responsible: Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies

ECTS Credits:

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-

up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Medicine Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

356001J: Health Sciences, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -**Opiskelumuoto:** Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish **ECTS Credits:** 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions .

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet:

Status:

Obligatory "field-specific" studies **ECTS Credits:**

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Faculty of Medicine

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

356001J: Health Sciences, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English

Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction: English/Finnish

Englisn/Fin Timinau

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status: Obligatory "field-specific" studies ECTS Credits: 3 credits Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement. **Learning outcomes:**

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

419115J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Faculty of Education

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Voidaan suorittaa useasti: Kyllä

ECTS Credits:

1 ECTS / 27 hours of work Language of instruction: Finnish or English, depending on the seminar Timing: During the next calendar year following the acceptance of Doctoral Training Plan. Learning outcomes: Upon completion of the course, the student is able to present his/her research plan in public. Contents: The theme of the student's PhD thesis.

Mode of delivery: Independent work. Learning activities and teaching methods: Public seminar. Target group: PhD students Prerequisites and co-requisites: No Recommended or required reading: No specific materials. Assessment methods and criteria: Presenting a research plan. Grading: pass/fail Person responsible: Dean of Research Working life cooperation: No

419105J: Doctoral thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Faculty of Education Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies **ECTS Credits:**

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

419115J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Faculty of Education

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Voidaan suorittaa useasti: Kyllä

ECTS Credits: 1 ECTS / 27 hours of work Language of instruction: Finnish or English, depending on the seminar **Timing:** During the next calendar year following the acceptance of Doctoral Training Plan. **Learning outcomes:** Upon completion of the course, the student is able to present his/her research plan in public. **Contents:** The theme of the student's PhD thesis.

Mode of delivery: Independent work. Learning activities and teaching methods: Public seminar. Target group: PhD students Prerequisites and co-requisites: No **Recommended or required reading:** No specific materials. Assessment methods and criteria: Presenting a research plan. Grading: pass/fail Person responsible: Dean of Research Working life cooperation: No

419105J: Doctoral thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Faculty of Education Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training.

Contents:

Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit

Language of instruction:

English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions *.* Read more about <u>assessment criteria</u> at the University of Oulu webpage.

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies

ECTS Credits:

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

419115J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -

Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Education Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op Voidaan suorittaa useasti: Kyllä **ECTS Credits:** 1 ECTS / 27 hours of work Language of instruction: Finnish or English, depending on the seminar Timing: During the next calendar year following the acceptance of Doctoral Training Plan. Learning outcomes: Upon completion of the course, the student is able to present his/her research plan in public. **Contents:** The theme of the student's PhD thesis. Mode of delivery: Independent work. Learning activities and teaching methods: Public seminar. Target group: PhD students Prerequisites and co-requisites: No **Recommended or required reading:** No specific materials. Assessment methods and criteria: Presenting a research plan. Grading: pass/fail Person responsible: Dean of Research Working life cooperation:

No

419105J: Doctoral thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Faculty of Education Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English

Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction: English/Finnish

Timina:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies

ECTS Credits:

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee. The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student. Read more about assessment criteria at the University of Oulu webpage. **Grading:** pass / fail **Person responsible:** Supervisor, follow-up group and doctoral training committee

722001J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Oulu Business School Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

722590J: MAN&ORG, Doctoral Dissertation, 0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Oulu Business School Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives:

Aiming to reflect own progress and plans of the doctoral training.

Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. **Learning activities and teaching methods:** Annual meetings. **Assessment methods and criteria:** Evaluation of progress reports and plans. Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass / fail **Person responsible:** Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions .

Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies **ECTS Credits:**

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Oulu Business School Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

722690J: IB, Doctoral Dissertation, 0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Oulu Business School Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions .

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet:

Status:

Obligatory "field-specific" studies **ECTS Credits:**

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

722001J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Oulu Business School

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

722190J: ACC, Doctoral Dissertation, 0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Oulu Business School Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits:

1 ECTS

Language of instruction:

Language of meeting as appropriate, progress reports in English or Finnish.

Timing:

Once per year

Learning outcomes:

The student is able to report effectively on the plans and accomplishments of his/her training.

The student is able to reflect on his/her training.

Course objectives:

Aiming to reflect own progress and plans of the doctoral training.

Aiming to provide supplementary support for the doctoral training.

Contents:

Written and oral presentation reports and plans.

Learning activities and teaching methods:

Annual meetings.

Assessment methods and criteria:

Evaluation of progress reports and plans.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction:

English

Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits Language of instruction: English/Finnish Timing: The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies. Learning outcomes: After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status: Obligatory "field-specific" studies ECTS Credits: 3 credits Language of instruction: English (or other, when appropriate) Timing: All full-time students whose doctoral study rights started or

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Followup Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

722001J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Oulu Business School

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

722790J: LOG, Doctoral dissertation, 0 - 180 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Oulu Business School Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -**Opiskelumuoto:** Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish **ECTS Credits:** 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School. **Recommended or required reading:** Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity. **Assessment methods and criteria:** Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Jarmo Pulkkinen (e-mail: **firstname.lastname (at) oulu.fi**)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status: Obligatory "field-specific" studies ECTS Credits:

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

722001J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Oulu Business School Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

722490J: MAR, Doctoral Dissertation, 0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Oulu Business School Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits:

1 ECTS

Language of instruction:

Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail

Person responsible:

Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English ECTS Credits:

1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School. **Recommended optional programme components:**

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies **ECTS Credits:**

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Supervisor, follow-up group and doctoral training committee

722001J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.08.2013 -**Opiskelumuoto:** Post-graduate Studies Laii: Course Vastuuyksikkö: Oulu Business School Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

722990J: FIN, Doctoral dissertation, 0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Oulu Business School Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -**Opiskelumuoto:** Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish **ECTS Credits:** 1 ECTS

Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods:

Annual meetings.

Assessment methods and criteria: Evaluation of progress reports and plans. Read more about <u>assessment criteria</u> at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing: The course is held once in the ofter 1 January 2010 and the

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions .

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies

ECTS Credits:

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Followup Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

722001J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Oulu Business School

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

722390J: ECON, Doctoral Dissertation, 0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Oulu Business School Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish **ECTS Credits:** 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English

ECTS Credits:

1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Jarmo Pulkkinen Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status: Obligatory "field-specific" studies ECTS Credits: 3 credits Language of instruction: English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-

up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Faculty of Medicine

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046001J: Medicine, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Medicine Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training. **Learning outcomes:**

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits Language of instruction: English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status: Obligatory "field-specific" studies ECTS Credits: 3 credits Language of instruction: English (or other, when appropriate) Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Faculty of Medicine

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046001J: Medicine, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Medicine Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition;

transportation; sport activities; Student associations; Student cards; Grants and loans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.
 Learning activities and teaching methods:
 obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h.
 Prerequisites and co-requisites:
 The student must have been admitted to the University of Oulu Graduate School.
 Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -**Opiskelumuoto:** Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies ECTS Credits:

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Followup Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee. The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Medicine Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046001J: Medicine, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Medicine Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish ECTS Credits: 1 ECTS Language of instruction:

Language of meeting as appropriate, progress reports in English or Finnish. **Timing:** Once per year **Learning outcomes:**

The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. **Learning activities and teaching methods:** Annual meetings. **Assessment methods and criteria:** Evaluation of progress reports and plans. Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass / fail **Person responsible:** Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits:

- 1 ECTS credit Language of instruction:
- English
- Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:**

Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies

ECTS Credits:

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Medicine Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046001J: Medicine, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Medicine Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish **ECTS Credits:** 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions .

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet:

Status:

Obligatory "field-specific" studies **ECTS Credits:**

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Faculty of Medicine

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046001J: Medicine, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Medicine Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -**Opiskelumuoto:** Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish **ECTS Credits:** 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction:

English

Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits Language of instruction: English/Finnish Timing: The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies. Learning outcomes: After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status: Obligatory "field-specific" studies ECTS Credits: 3 credits Language of instruction: English (or other, when appropriate) Timing: All full-time students whose doctoral study rights started or

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Followup Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Faculty of Medicine

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046001J: Medicine, thesis, 0 op

Voimassaolo: 01.08.2005 -**Opiskelumuoto:** Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Medicine Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -**Opiskelumuoto:** Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish **ECTS Credits:** 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School. **Recommended or required reading:** Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity. **Assessment methods and criteria:** Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Jarmo Pulkkinen (e-mail: **firstname.lastname (at) oulu.fi**)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status: Obligatory "field-specific" studies ECTS Credits:

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Medicine Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046001J: Medicine, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Medicine Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS

Language of instruction:

Language of meeting as appropriate, progress reports in English or Finnish. **Timing:**

Once per year Learning outcomes:

The student is able to report effectively on the plans and accomplishments of his/her training.

The student is able to reflect on his/her training.

Course objectives:

Aiming to reflect own progress and plans of the doctoral training.

Aiming to provide supplementary support for the doctoral training.

Contents:

Written and oral presentation reports and plans.

Learning activities and teaching methods:

Annual meetings.

Assessment methods and criteria: Evaluation of progress reports and plans. Read more about <u>assessment criteria</u> at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing: The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School. **Recommended optional programme components:**

Recommended or required reading: Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria: Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. Grading: pass/fail Person responsible: Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies

ECTS Credits:

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass / fail **Person responsible:** Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Medicine Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046001J: Medicine, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Medicine Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish **ECTS Credits:** 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings.

Assessment methods and criteria:

Evaluation of progress reports and plans. Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass / fail **Person responsible:** Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions .

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies

ECTS Credits:

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Faculty of Medicine

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046001J: Medicine, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Medicine Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish **ECTS Credits:** 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry **Opintokohteen kielet:** English

ECTS Credits:

1 ECTS credit

Language of instruction:

English

Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Jarmo Pulkkinen Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-01 Research Plan and Seminar, Research Plan 3.0 op Status: Obligatory "field-specific" studies ECTS Credits: 3 credits

Language of instruction: English (or other, when appropriate) Timing: All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Faculty of Medicine

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046001J: Medicine, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Medicine Arvostelu: suor (pass), oiv (excellent), khy (excellent) Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laii: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish **ECTS Credits:** 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits Language of instruction: English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status: Obligatory "field-specific" studies ECTS Credits: 3 credits Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Faculty of Medicine

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046001J: Medicine, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Medicine Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English

Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition;

transportation; sport activities; Student associations; Student cards; Grants and loans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.
 Learning activities and teaching methods:
 obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h.
 Prerequisites and co-requisites:
 The student must have been admitted to the University of Oulu Graduate School.
 Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -**Opiskelumuoto:** Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies ECTS Credits:

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Followup Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee. The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full

doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Medicine Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046001J: Medicine, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Medicine Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish ECTS Credits: 1 ECTS Language of instruction:

Language of meeting as appropriate, progress reports in English or Finnish. **Timing:** Once per year **Learning outcomes:**

The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. **Learning activities and teaching methods:** Annual meetings. **Assessment methods and criteria:** Evaluation of progress reports and plans. Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass / fail **Person responsible:** Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits:

- 1 ECTS credit Language of instruction:
- English
- Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:**

Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies

ECTS Credits:

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Medicine Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046001J: Medicine, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Medicine Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish **ECTS Credits:** 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions .

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet:

Status:

Obligatory "field-specific" studies **ECTS Credits:**

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Faculty of Medicine

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046001J: Medicine, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Medicine Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -**Opiskelumuoto:** Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish **ECTS Credits:** 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction:

English

Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits Language of instruction: English/Finnish Timing: The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies. Learning outcomes: After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status: Obligatory "field-specific" studies ECTS Credits: 3 credits Language of instruction: English (or other, when appropriate) Timing: All full-time students whose doctoral study rights started or

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Followup Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

766692J: Research Plan and Seminar, Seminar, 1 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: English

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

ECTS Credits:

1 ECTS credits

Language of instruction:

English (or other, when appropriate) Timina:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the course within two years of starting the doctoral training.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirements for the doctoral degrees established by UniOGS in Spring 2012 must complete the course within one year of transferring to the new requirements.

The students should complete 920012J Research plan and seminar, plan, 3 ECTS credits as part of their application to transfer to the new requirements.

Learning outcomes:

After the course the student knows how to present and discus his/her research progress in oral form, and has learned how to critically discuss the research of others.

Contents:

Public presentation of the research in the form of a public Research Plan Seminar, or a Research Seminar. **Mode of delivery:**

Personal work, oral presentation of the research.

Learning activities and teaching methods:

Presentation and discussion of the research plan, or the research progress, to senior scientists/professionals and doctoral students (Research Plan Seminar, or Research Seminar).

Target group:

Doctoral students registered in the University of Oulu Graduate School, obligatory "field-specific" studies

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended optional programme components:

No alternative course units or course units that should be completed simultaneously

Recommended or required reading:

Background literature of own research field.

Assessment methods and criteria:

Public presentation of the research plan/results in a Research (Plan) Seminar.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

Pass/fail

Person responsible:

Responsible persons of the relevant Majors/fields of doctoral studies.

Working life cooperation:

No work placement period

Other information:

The study credit is awarded by the responsible person for the Field/Major, or a person designated by the latter, after the successful completion of the research plan seminar, or research seminar by the student.

766602J: Ph.D. Thesis in Physics, 0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing: The course is held once in t

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions .

Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:**

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies ECTS Credits: 3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

766692J: Research Plan and Seminar, Seminar, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies

Laji: Course

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: English

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

ECTS Credits:

1 ECTS credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the course within two years of starting the doctoral training.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirements for the doctoral degrees established by UniOGS in Spring 2012 must complete the course within one year of transferring to the new requirements.

The students should complete 920012J Research plan and seminar, plan, 3 ECTS credits as part of their application to transfer to the new requirements.

Learning outcomes:

After the course the student knows how to present and discus his/her research progress in oral form, and has learned how to critically discuss the research of others.

Contents:

Public presentation of the research in the form of a public Research Plan Seminar, or a Research Seminar.

Mode of delivery:

Personal work, oral presentation of the research.

Learning activities and teaching methods:

Presentation and discussion of the research plan, or the research progress, to senior scientists/professionals and doctoral students (Research Plan Seminar, or Research Seminar).

Target group:

Doctoral students registered in the University of Oulu Graduate School, obligatory "field-specific" studies

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended optional programme components:

No alternative course units or course units that should be completed simultaneously

Recommended or required reading:

Background literature of own research field.

Assessment methods and criteria:

Public presentation of the research plan/results in a Research (Plan) Seminar.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

Pass/fail

Person responsible:

Responsible persons of the relevant Majors/fields of doctoral studies.

Working life cooperation:

No work placement period

Other information:

The study credit is awarded by the responsible person for the Field/Major, or a person designated by the latter, after the successful completion of the research plan seminar, or research seminar by the student.

762602J: Ph.D. Thesis in Geophysics, 0 op

Opiskelumuoto: Post-graduate Studies

Laji: Defence of the Ph. D. thesis

Arvostelu: suor (pass), oiv (excellent), khy (excellent)

Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -**Opiskelumuoto:** Post-graduate Studies Laii: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish **ECTS Credits:** 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timina: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing: The course is held once in the s

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate

School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and loans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Jarmo Pulkkinen Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for responsible conduct of research by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about assessment criteria at the University of Oulu webpage.

Grading: pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies **ECTS Credits:**

3 credits

Language of instruction:

English (or other, when appropriate)

Timina:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second vear.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

766692J: Research Plan and Seminar, Seminar, 1 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: English

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

ECTS Credits:

1 ECTS credits

Language of instruction:

English (or other, when appropriate) **Timing:**

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the course within two years of starting the doctoral training.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirements for the doctoral degrees established by UniOGS in Spring 2012 must complete the course within one year of transferring to the new requirements.

The students should complete 920012J Research plan and seminar, plan, 3 ECTS credits as part of their application to transfer to the new requirements.

Learning outcomes:

After the course the student knows how to present and discus his/her research progress in oral form, and has learned how to critically discuss the research of others.

Contents:

Public presentation of the research in the form of a public Research Plan Seminar, or a Research Seminar.

Mode of delivery:

Personal work, oral presentation of the research.

Learning activities and teaching methods:

Presentation and discussion of the research plan, or the research progress, to senior scientists/professionals and doctoral students (Research Plan Seminar, or Research Seminar).

Target group:

Doctoral students registered in the University of Oulu Graduate School, obligatory "field-specific" studies

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended optional programme components:

No alternative course units or course units that should be completed simultaneously

Recommended or required reading:

Background literature of own research field.

Assessment methods and criteria:

Public presentation of the research plan/results in a Research (Plan) Seminar. Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** Pass/fail **Person responsible:** Responsible persons of the relevant Majors/fields of doctoral studies. **Working life cooperation:** No work placement period **Other information:** The study credit is awarded by the responsible person for the Field/Major, or a person designated by the latter, after the successful completion of the research plan seminar, or research seminar by the student.

763602J: Ph.D. Thesis in Theoretical Physics, 0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -**Opiskelumuoto:** Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits:

1 ECTS credit

Language of instruction:

English

Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions .

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Jarmo Pulkkinen

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies

ECTS Credits:

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

766692J: Research Plan and Seminar, Seminar, 1 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: English

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

ECTS Credits:

1 ECTS credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the course within two years of starting the doctoral training.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirements for the doctoral degrees established by UniOGS in Spring 2012 must complete the course within one year of transferring to the new requirements. The students should complete 920012J Research plan and seminar, plan, 3 ECTS credits as part of their application to transfer to the new requirements.

Learning outcomes:

After the course the student knows how to present and discus his/her research progress in oral form, and has learned how to critically discuss the research of others.

Contents:

Public presentation of the research in the form of a public Research Plan Seminar, or a Research Seminar. **Mode of delivery:**

Personal work, oral presentation of the research.

Learning activities and teaching methods:

Presentation and discussion of the research plan, or the research progress, to senior scientists/professionals and doctoral students (Research Plan Seminar, or Research Seminar).

Target group:

Doctoral students registered in the University of Oulu Graduate School, obligatory "field-specific" studies **Prerequisites and co-requisites:**

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended optional programme components:

No alternative course units or course units that should be completed simultaneously

Recommended or required reading:

Background literature of own research field.

Assessment methods and criteria:

Public presentation of the research plan/results in a Research (Plan) Seminar.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

Pass/fail

Person responsible:

Responsible persons of the relevant Majors/fields of doctoral studies.

Working life cooperation:

No work placement period

Other information:

The study credit is awarded by the responsible person for the Field/Major, or a person designated by the latter, after the successful completion of the research plan seminar, or research seminar by the student.

765602J: Ph.D. Thesis in Astronomy, 0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish.

Timing:

Once per year

Learning outcomes:

The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. **Learning activities and teaching methods:** Annual meetings. **Assessment methods and criteria:** Evaluation of progress reports and plans. Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass / fail

Person responsible:

Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and loans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

- Language of instruction:
- English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies **ECTS Credits:**

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

460023J: Research Plan and Seminar, Seminar, 1 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Field of Mechanical Engineering Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

460001J: Mechanical Engineering, thesis, 0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Field of Mechanical Engineering Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans.

Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits:

1 ECTS credit

Language of instruction:

English

Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies

ECTS Credits:

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

460023J: Research Plan and Seminar, Seminar, 1 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Field of Mechanical Engineering

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

460001J: Mechanical Engineering, thesis, 0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Field of Mechanical Engineering Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -**Opiskelumuoto:** Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish **ECTS Credits:** 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives:

Aiming to reflect own progress and plans of the doctoral training.

Aiming to provide supplementary support for the doctoral training.

Contents:

Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail

Person responsible:

Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

ECTS Credits:

1 ECTS credit

Language of instruction:

English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Jarmo Pulkkinen Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits Language of instruction: English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail **Opintokohteen kielet:** Finnish Leikkaavuudet: 920004J-01 Research Plan and Seminar, Research Plan 3.0 op Status: Obligatory "field-specific" studies **ECTS Credits:** 3 credits Language of instruction: English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

460023J: Research Plan and Seminar, Seminar, 1 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Field of Mechanical Engineering

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

460001J: Mechanical Engineering, thesis, 0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Field of Mechanical Engineering Arvostelu: suor (pass), oiv (excellent), khy (excellent) Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laii: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish **ECTS Credits:** 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits Language of instruction: English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status: Obligatory "field-specific" studies ECTS Credits: 3 credits Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

520023J: Research Plan and Seminar, Seminar, 1 op

Voimassaolo: 01.01.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Department of Electrical Engineering

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

520001J: Electrical Engineering, thesis, 0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Department of Electrical Engineering Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English

Timing: The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition;

transportation; sport activities; Student associations; Student cards; Grants and loans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.
Learning activities and teaching methods:
obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h.
Prerequisites and co-requisites:
The student must have been admitted to the University of Oulu Graduate School.
Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -**Opiskelumuoto:** Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies ECTS Credits:

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Followup Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee. The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

520023J: Research Plan and Seminar, Seminar, 1 op

Voimassaolo: 01.01.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Department of Electrical Engineering Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

520001J: Electrical Engineering, thesis, 0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Department of Electrical Engineering Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. **Learning activities and teaching methods:** Annual meetings. **Assessment methods and criteria:** Evaluation of progress reports and plans. Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass / fail **Person responsible:** Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria: Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. Grading: pass/fail Person responsible: Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction: English/Finnish

Timina:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies

ECTS Credits:

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

Voimassaolo: 01.01.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Department of Electrical Engineering Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

520001J: Electrical Engineering, thesis, 0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Department of Electrical Engineering Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions .

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet:

Status:

Obligatory "field-specific" studies **ECTS Credits:**

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

522023J: Research Plan and Seminar, Seminar, 1 op

Voimassaolo: 01.01.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Department of Electrical Engineering

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

522001J: Telecommunication Engineering, thesis, 0 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Department of Electrical Engineering Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -**Opiskelumuoto:** Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish **ECTS Credits:** 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS. 920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit

Language of instruction:

English

Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions .

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits Language of instruction: English/Finnish Timing: The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies. Learning outcomes: After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status: Obligatory "field-specific" studies ECTS Credits: 3 credits Language of instruction: English (or other, when appropriate) Timing: All full-time students whose doctoral study rights started o

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Followup Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

521023J: Research Plan and Seminar, Seminar, 1 op

Voimassaolo: 01.01.2010 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Department of Computer Science and Engineering

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

521001J: Information Engineering, thesis, 0 op

Voimassaolo: 01.08.2011 -**Opiskelumuoto:** Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Department of Computer Science and Engineering Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -**Opiskelumuoto:** Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish **ECTS Credits:** 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions .

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass/fail Person responsible:

Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits Language of instruction: English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status: Obligatory "field-specific" studies ECTS Credits: 3 credits Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

520023J: Research Plan and Seminar, Seminar, 1 op

Voimassaolo: 01.01.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Department of Electrical Engineering

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

520001J: Electrical Engineering, thesis, 0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Department of Electrical Engineering Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English

Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition;

transportation; sport activities; Student associations; Student cards; Grants and loans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.
 Learning activities and teaching methods:
 obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h.
 Prerequisites and co-requisites:
 The student must have been admitted to the University of Oulu Graduate School.
 Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -**Opiskelumuoto:** Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies ECTS Credits:

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Followup Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee. The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail Person responsible:

Supervisor, follow-up group and doctoral training committee

520023J: Research Plan and Seminar, Seminar, 1 op

Voimassaolo: 01.01.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Department of Electrical Engineering Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

520001J: Electrical Engineering, thesis, 0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Department of Electrical Engineering Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. **Learning activities and teaching methods:** Annual meetings. **Assessment methods and criteria:** Evaluation of progress reports and plans. Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass / fail **Person responsible:** Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria: Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. Grading: pass/fail Person responsible: Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction: English/Finnish

Timina:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies

ECTS Credits:

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

Voimassaolo: 01.01.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Field of Industrial Engineering and Management Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

550001J: Industrial Engineering and Management, thesis, 0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Field of Industrial Engineering and Management Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible:

Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions .

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet:

Status:

Obligatory "field-specific" studies **ECTS Credits:**

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

480023J: Research Plan and Seminar, Seminar, 1 - 4 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Field of Process and Environmental Engineering

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

480001J: Environmental Engineering, thesis, 0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Field of Process and Environmental Engineering Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits:

1 ECTS

Language of instruction:

Language of meeting as appropriate, progress reports in English or Finnish.

Timing:

Once per year

Learning outcomes:

The student is able to report effectively on the plans and accomplishments of his/her training.

The student is able to reflect on his/her training.

Course objectives:

Aiming to reflect own progress and plans of the doctoral training.

Aiming to provide supplementary support for the doctoral training.

Contents:

Written and oral presentation reports and plans.

Learning activities and teaching methods:

Annual meetings.

Assessment methods and criteria:

Evaluation of progress reports and plans.

Read more about <u>assessment criteria</u> at the University of Oulu webpage.

```
Grading:
```

pass / fail

Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction:

English

Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits Language of instruction: English/Finnish Timing: The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies. Learning outcomes: After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status: Obligatory "field-specific" studies ECTS Credits: 3 credits Language of instruction: English (or other, when appropriate) Timing: All full-time students whose doctoral study rights started or

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Followup Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

470023J: Research Plan and Seminar, Seminar, 1 op

Voimassaolo: 01.01.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Field of Process and Environmental Engineering

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

470001J: Process Engineering, thesis, 0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Field of Process and Environmental Engineering Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -**Opiskelumuoto:** Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish **ECTS Credits:** 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:**

Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School. **Recommended or required reading:** Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity. **Assessment methods and criteria:** Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Jarmo Pulkkinen (e-mail: **firstname.lastname (at) oulu.fi**)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status: Obligatory "field-specific" studies ECTS Credits:

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

460023J: Research Plan and Seminar, Seminar, 1 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Field of Mechanical Engineering Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

460001J: Mechanical Engineering, thesis, 0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Field of Mechanical Engineering Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits:

1 ECTS

Language of instruction:

Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail

Person responsible:

Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English ECTS Credits:

1 ECTS credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School. **Recommended optional programme components:**

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> criteria at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies **ECTS Credits:**

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass / fail **Person responsible:** Supervisor, follow-up group and doctoral training committee

460023J: Research Plan and Seminar, Seminar, 1 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Field of Mechanical Engineering Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

460001J: Mechanical Engineering, thesis, 0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Field of Mechanical Engineering Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings.

Assessment methods and criteria: Evaluation of progress reports and plans. Read more about <u>assessment criteria</u> at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing: The course is held once in th

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions .

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies

ECTS Credits:

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Followup Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

460023J: Research Plan and Seminar, Seminar, 1 op

Voimassaolo: 01.08.2013 -**Opiskelumuoto:** Post-graduate Studies Laji: Course

Vastuuyksikkö: Field of Mechanical Engineering

Arvostelu: 1 - 5, pass, fail

503

Opintokohteen kielet: Finnish Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

460001J: Mechanical Engineering, thesis, 0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Field of Mechanical Engineering Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish **ECTS Credits:** 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English

ECTS Credits:

1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Jarmo Pulkkinen Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status: Obligatory "field-specific" studies ECTS Credits: 3 credits Language of instruction: English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-

up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

460023J: Research Plan and Seminar, Seminar, 1 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Field of Mechanical Engineering

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

460001J: Mechanical Engineering, thesis, 0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Field of Mechanical Engineering Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training. **Learning outcomes:**

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits Language of instruction: English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status: Obligatory "field-specific" studies ECTS Credits: 3 credits Language of instruction: English (or other, when appropriate) Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

460023J: Research Plan and Seminar, Seminar, 1 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Field of Mechanical Engineering

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

460001J: Mechanical Engineering, thesis, 0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Field of Mechanical Engineering Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English

Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition;

transportation; sport activities; Student associations; Student cards; Grants and loans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.
Learning activities and teaching methods:
obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h.
Prerequisites and co-requisites:
The student must have been admitted to the University of Oulu Graduate School.
Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -**Opiskelumuoto:** Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies ECTS Credits:

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Followup Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee. The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student. Read more about assessment criteria at the University of Oulu webpage. **Grading:**

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

460023J: Research Plan and Seminar, Seminar, 1 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Field of Mechanical Engineering Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

460001J: Mechanical Engineering, thesis, 0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Field of Mechanical Engineering Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. **Learning activities and teaching methods:** Annual meetings. **Assessment methods and criteria:** Evaluation of progress reports and plans. Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass / fail **Person responsible:** Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria: Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. Grading: pass/fail Person responsible: Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction: English/Finnish

Timina:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies

ECTS Credits:

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Field of Mechanical Engineering Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

460001J: Mechanical Engineering, thesis, 0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Field of Mechanical Engineering Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible:

Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions .

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet:

Status:

Obligatory "field-specific" studies **ECTS Credits:**

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

800703J: Research Plan and Seminar, Seminar, 1 - 4 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

800695J: Doctoral Thesis in Mathematics, 0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing: The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Jarmo Pulkkinen Opintokohteen kielet: Finnish

ECTS Credits:

- 2 ECTS credits Language of instruction:
- English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research. **Contents:**

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods: General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status: Obligatory "field-specific" studies ECTS Credits: 3 credits Language of instruction: English (or other, when appropriate) Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement. **Learning outcomes:**

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

800703J: Research Plan and Seminar, Seminar, 1 - 4 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

801695J: Doctoral Thesis in Applied Mathematics, 0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English

Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition;

transportation; sport activities; Student associations; Student cards; Grants and loans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.
Learning activities and teaching methods:
obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h.
Prerequisites and co-requisites:
The student must have been admitted to the University of Oulu Graduate School.
Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -**Opiskelumuoto:** Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies ECTS Credits:

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Followup Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee. The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student. Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass / fail **Person responsible:**

Supervisor, follow-up group and doctoral training committee

800703J: Research Plan and Seminar, Seminar, 1 - 4 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

802695J: Doctoral Thesis in Statistics, 0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing: The course is held once in t

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions .

Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:**

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies ECTS Credits: 3 credits

Janguage of inst

Language of instruction: English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

683503J: Research Plan and Seminar, Seminar (Saami Culture), 1 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Humanities Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

682013J: Doctoral dissertation (Saami Culture), 0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Giellagas Institute for Saami Studies Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English

ECTS Credits:

1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Jarmo Pulkkinen Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status: Obligatory "field-specific" studies ECTS Credits: 3 credits Language of instruction: English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-

up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Faculty of Medicine

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046001J: Medicine, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Medicine Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training. **Learning outcomes:**

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits Language of instruction: English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status: Obligatory "field-specific" studies ECTS Credits: 3 credits Language of instruction: English (or other, when appropriate) Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Faculty of Medicine

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046001J: Medicine, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Medicine Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English

Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition;

transportation; sport activities; Student associations; Student cards; Grants and loans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.
Learning activities and teaching methods:
obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h.
Prerequisites and co-requisites:
The student must have been admitted to the University of Oulu Graduate School.
Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -**Opiskelumuoto:** Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies ECTS Credits:

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Followup Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee. The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Medicine Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046001J: Medicine, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Medicine Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish ECTS Credits: 1 ECTS Language of instruction:

Language of meeting as appropriate, progress reports in English or Finnish. **Timing:** Once per year **Learning outcomes:**

The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. **Learning activities and teaching methods:** Annual meetings. **Assessment methods and criteria:** Evaluation of progress reports and plans. Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass / fail **Person responsible:** Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits:

- 1 ECTS credit Language of instruction:
- English
- Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:**

Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction: English/Finnish

Timina:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> criteria at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies

ECTS Credits:

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Medicine Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046001J: Medicine, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Medicine Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish **ECTS Credits:** 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions .

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet:

Status:

Obligatory "field-specific" studies **ECTS Credits:**

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Faculty of Medicine

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046001J: Medicine, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Medicine Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -**Opiskelumuoto:** Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish **ECTS Credits:** 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction:

English

Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits Language of instruction: English/Finnish Timing: The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies. Learning outcomes: After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status: Obligatory "field-specific" studies ECTS Credits: 3 credits Language of instruction: English (or other, when appropriate) Timing: All full-time students whose doctoral study rights started or

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Followup Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Faculty of Medicine

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046001J: Medicine, thesis, 0 op

Voimassaolo: 01.08.2005 -**Opiskelumuoto:** Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Medicine Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -**Opiskelumuoto:** Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish **ECTS Credits:** 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School. **Recommended or required reading:** Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity. **Assessment methods and criteria:** Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Jarmo Pulkkinen (e-mail: **firstname.lastname (at) oulu.fi**)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status: Obligatory "field-specific" studies ECTS Credits:

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Medicine Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046001J: Medicine, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Medicine Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS

Language of instruction:

Language of meeting as appropriate, progress reports in English or Finnish. Timing:

Once per year

Learning outcomes:

The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives:

Aiming to reflect own progress and plans of the doctoral training.

Aiming to provide supplementary support for the doctoral training.

Contents:

Written and oral presentation reports and plans.

Learning activities and teaching methods:

Annual meetings.

Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -**Opiskelumuoto:** Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing: The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or

after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and loans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School. **Recommended optional programme components:**

Recommended or required reading: Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria: Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. Grading: pass/fail Person responsible: Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies

ECTS Credits:

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass / fail **Person responsible:** Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Medicine Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046001J: Medicine, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Medicine Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish **ECTS Credits:** 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings.

Assessment methods and criteria:

Evaluation of progress reports and plans. Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass / fail **Person responsible:** Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions .

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies

ECTS Credits:

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Faculty of Medicine

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046002J: Dentistry, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

ECTS Credits:

1 ECTS credit

Language of instruction:

English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Jarmo Pulkkinen Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits Language of instruction: English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail **Opintokohteen kielet:** Finnish Leikkaavuudet: 920004J-01 Research Plan and Seminar, Research Plan 3.0 op Status: Obligatory "field-specific" studies **ECTS Credits:** 3 credits Language of instruction: English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Faculty of Medicine

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046002J: Dentistry, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English Voimassaolo: 01.08.2012 -

920007J: Follow-up Group Reporting and meetings, 1 op

Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions .

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass/fail Person responsible:

Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits Language of instruction: English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status: Obligatory "field-specific" studies ECTS Credits: 3 credits Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Faculty of Medicine

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046002J: Dentistry, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English

Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies

ECTS Credits:

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee. The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student. Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass / fail **Person responsible:** Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Medicine Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op Ei opintojaksokuvauksia.

046001J: Medicine, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Medicine Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training.

Contents:

Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit

Language of instruction:

English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions *.* Read more about <u>assessment criteria</u> at the University of Oulu webpage.

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies

ECTS Credits:

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -

Opiskelumuoto: Post-graduate StudiesLaji: CourseVastuuyksikkö: Faculty of MedicineArvostelu: 1 - 5, pass, failOpintokohteen kielet: FinnishLeikkaavuudet:920004J-02Research Plan and Seminar, seminar1.0 op

Ei opintojaksokuvauksia.

046001J: Medicine, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Medicine Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -**Opiskelumuoto:** Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail **Opintokohteen kielet:** Finnish ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions .

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Obligatory "field-specific" studies **ECTS Credits:**

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Faculty of Medicine

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046001J: Medicine, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Medicine Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -**Opiskelumuoto:** Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish **ECTS Credits:** 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing: The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Jarmo Pulkkinen Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits Language of instruction: English/Finnish Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research. **Contents:**

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods: General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status: Obligatory "field-specific" studies ECTS Credits: 3 credits Language of instruction: English (or other, when appropriate) Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement. **Learning outcomes:**

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Faculty of Medicine

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046001J: Medicine, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Medicine Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits:

1 ECTS

Language of instruction:

Language of meeting as appropriate, progress reports in English or Finnish.

Timing:

Once per year

Learning outcomes:

The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training.

Aiming to provide supplementary support for the doctoral training.

Contents:

Written and oral presentation reports and plans.

Learning activities and teaching methods:

Annual meetings.

- Assessment methods and criteria:
- Evaluation of progress reports and plans.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate

School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Jarmo Pulkkinen Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for responsible conduct of research by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about assessment criteria at the University of Oulu webpage.

Grading: pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies **ECTS Credits:**

3 credits

Language of instruction:

English (or other, when appropriate)

Timina:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second vear.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Medicine Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046001J: Medicine, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Medicine Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. **Timing:** Once per year **Learning outcomes:**

The student is able to report effectively on the plans and accomplishments of his/her training.

The student is able to reflect on his/her training.

Course objectives:

Aiming to reflect own progress and plans of the doctoral training.

Aiming to provide supplementary support for the doctoral training.

Contents:

Written and oral presentation reports and plans.

Learning activities and teaching methods:

Annual meetings.

Assessment methods and criteria:

Evaluation of progress reports and plans.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

```
pass / fail
```

Person responsible:

Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading: Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria: Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. Grading: pass/fail Person responsible: Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies **ECTS Credits:**

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Medicine Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046002J: Dentistry, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits:

1 ECTS credit

Language of instruction:

English

Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies

ECTS Credits:

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Faculty of Medicine

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

Ei opintojaksokuvauksia.

046001J: Medicine, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Medicine Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

ECTS Credits:

1 ECTS credit

Language of instruction:

English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Jarmo Pulkkinen Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits Language of instruction: English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail **Opintokohteen kielet:** Finnish Leikkaavuudet: 920004J-01 Research Plan and Seminar, Research Plan 3.0 op Status: Obligatory "field-specific" studies **ECTS Credits:** 3 credits Language of instruction: English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Faculty of Medicine

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046001J: Medicine, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Medicine Arvostelu: suor (pass), oiv (excellent), khy (excellent) Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laii: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish **ECTS Credits:** 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits Language of instruction: English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status: Obligatory "field-specific" studies ECTS Credits: 3 credits Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Faculty of Medicine

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046002J: Dentistry, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English

Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction: English/Finnish

Timina:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies

ECTS Credits:

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee. The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student. Read more about assessment criteria at the University of Oulu webpage. **Grading:** pass / fail **Person responsible:** Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Medicine Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op Ei opintojaksokuvauksia.

046001J: Medicine, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Medicine Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training.

Contents:

Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit

Language of instruction:

English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions *.* Read more about <u>assessment criteria</u> at the University of Oulu webpage.

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies

ECTS Credits:

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -

Opiskelumuoto: Post-graduate StudiesLaji: CourseVastuuyksikkö: Faculty of MedicineArvostelu: 1 - 5, pass, failOpintokohteen kielet: FinnishLeikkaavuudet:920004J-02Research Plan and Seminar, seminar1.0 op

Ei opintojaksokuvauksia.

046001J: Medicine, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Medicine Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -**Opiskelumuoto:** Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail **Opintokohteen kielet:** Finnish ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions .

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Obligatory "field-specific" studies **ECTS Credits:**

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Faculty of Medicine

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046001J: Medicine, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Medicine Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -**Opiskelumuoto:** Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish **ECTS Credits:** 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing: The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and loans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Jarmo Pulkkinen Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits Language of instruction: English/Finnish Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research. **Contents:**

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods: General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status: Obligatory "field-specific" studies ECTS Credits: 3 credits Language of instruction: English (or other, when appropriate) Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement. **Learning outcomes:**

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Faculty of Medicine

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046001J: Medicine, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Medicine Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits:

1 ECTS

Language of instruction:

Language of meeting as appropriate, progress reports in English or Finnish.

Timing:

Once per year

Learning outcomes:

The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training.

Contents:

Written and oral presentation reports and plans.

Learning activities and teaching methods:

Annual meetings.

Assessment methods and criteria: Evaluation of progress reports and plans.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing: The course is held once in the

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate

School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and loans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Jarmo Pulkkinen Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for responsible conduct of research by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about assessment criteria at the University of Oulu webpage.

Grading: pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies **ECTS Credits:**

3 credits

Language of instruction:

English (or other, when appropriate)

Timina:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second vear.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Medicine Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046001J: Medicine, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Medicine Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. **Timing:** Once per year **Learning outcomes:**

The student is able to report effectively on the plans and accomplishments of his/her training.

The student is able to reflect on his/her training.

Course objectives:

Aiming to reflect own progress and plans of the doctoral training.

Aiming to provide supplementary support for the doctoral training.

Contents:

Written and oral presentation reports and plans.

Learning activities and teaching methods:

Annual meetings.

Assessment methods and criteria:

Evaluation of progress reports and plans.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

```
pass / fail
```

Person responsible:

Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading: Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria: Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. Grading: pass/fail Person responsible: Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies **ECTS Credits:**

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Medicine Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046001J: Medicine, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Medicine Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans.

Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass / fail **Person responsible:**

Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits:

1 ECTS credit

Language of instruction: English

Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions .

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction: English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies

ECTS Credits:

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Faculty of Medicine

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

Ei opintojaksokuvauksia.

046002J: Dentistry, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit

Language of instruction:

English

Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Jarmo Pulkkinen Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits Language of instruction: English/Finnish Timing: The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies ECTS Credits:

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee. **Mode of delivery:**

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Medicine Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046001J: Medicine, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Medicine Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits:

1 ECTS

Language of instruction:

Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail

Person responsible:

Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English ECTS Credits:

1 ECTS credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School. **Recommended optional programme components:**

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies **ECTS Credits:**

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass / fail **Person responsible:** Supervisor, follow-up group and doctoral training committee

771608J: Research Plan and Seminar, Seminar, Geosciences, 1 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Oulu Mining School Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: English Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

771603J: Ph. D. thesis, 0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Oulu Mining School Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans.

Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass / fail **Person responsible:**

Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits:

1 ECTS credit

Language of instruction: English

Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and loans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions .

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction: English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies

ECTS Credits:

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

771608J: Research Plan and Seminar, Seminar, Geosciences, 1 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Oulu Mining School

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: English

Leikkaavuudet:

Ei opintojaksokuvauksia.

771603J: Ph. D. thesis, 0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Oulu Mining School Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit

Language of instruction:

English

Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Jarmo Pulkkinen Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits Language of instruction: English/Finnish Timing: The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status: Obligatory "field-specific" studies ECTS Credits: 3 credits Language of instruction: English (or other, when appropriate) Timing: All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

450023J: Research Plan and Seminar, Seminar, 1 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

450001J: Architecture, thesis, 0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Oulu School of Architecture Arvostelu: suor (pass), oiv (excellent), khy (excellent) Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laii: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish **ECTS Credits:** 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits Language of instruction: English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status: Obligatory "field-specific" studies ECTS Credits: 3 credits Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

450023J: Research Plan and Seminar, Seminar, 1 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

450001J: Architecture, thesis, 0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Oulu School of Architecture Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English

Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition;

transportation; sport activities; Student associations; Student cards; Grants and loans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.
 Learning activities and teaching methods:
 obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h.
 Prerequisites and co-requisites:
 The student must have been admitted to the University of Oulu Graduate School.
 Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -**Opiskelumuoto:** Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies ECTS Credits:

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Followup Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee. The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail Person responsible:

Supervisor, follow-up group and doctoral training committee

700122J: Research Plan and Seminar, Seminar (History of Science and Ideas), 1 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Humanities Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

702104J: Doctoral dissertation (History of Science and Ideas), 0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Faculty of Humanities Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. **Learning activities and teaching methods:** Annual meetings. **Assessment methods and criteria:** Evaluation of progress reports and plans. Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass / fail **Person responsible:** Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions .

Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies **ECTS Credits**:

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Medicine Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046001J: Medicine, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Medicine Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish **ECTS Credits:** 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions .

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet:

Status:

Obligatory "field-specific" studies **ECTS Credits:**

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Faculty of Medicine

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046001J: Medicine, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Medicine Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -**Opiskelumuoto:** Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish **ECTS Credits:** 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction:

English

Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits Language of instruction: English/Finnish Timing: The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies. Learning outcomes: After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status: Obligatory "field-specific" studies ECTS Credits: 3 credits Language of instruction: English (or other, when appropriate) Timing: All full-time students whose doctoral study rights started or

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Followup Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

687358J: Research Plan and Seminar, Seminar (Archaeology), 1 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Faculty of Humanities

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

712004J: Doctoral dissertation (archaeology), 0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Faculty of Humanities Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -**Opiskelumuoto:** Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish **ECTS Credits:** 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the

doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading: Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction: English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for responsible conduct of research by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about assessment criteria at the University of Oulu webpage.

Grading: pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -**Opiskelumuoto:** Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies **ECTS Credits:**

3 credits

Language of instruction:

English (or other, when appropriate)

Timina:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second vear.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Medicine Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046001J: Medicine, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Medicine Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. **Timing:** Once per year **Learning outcomes:**

The student is able to report effectively on the plans and accomplishments of his/her training.

The student is able to reflect on his/her training.

Course objectives:

Aiming to reflect own progress and plans of the doctoral training.

Aiming to provide supplementary support for the doctoral training.

Contents:

Written and oral presentation reports and plans.

Learning activities and teaching methods:

Annual meetings.

Assessment methods and criteria:

Evaluation of progress reports and plans.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

```
pass / fail
```

Person responsible:

Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading: Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria: Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. Grading: pass/fail Person responsible: Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies **ECTS Credits:**

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Medicine Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

356001J: Health Sciences, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits:

1 ECTS credit

Language of instruction:

English

Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies

ECTS Credits:

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

460023J: Research Plan and Seminar, Seminar, 1 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Field of Mechanical Engineering

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

460001J: Mechanical Engineering, thesis, 0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Field of Mechanical Engineering Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -**Opiskelumuoto:** Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish **ECTS Credits:** 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training.

Aiming to provide supplementary support for the doctoral training.

Contents:

Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail

Person responsible:

Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

ECTS Credits:

1 ECTS credit

Language of instruction:

English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Jarmo Pulkkinen Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits Language of instruction: English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail **Opintokohteen kielet:** Finnish Leikkaavuudet: 920004J-01 Research Plan and Seminar, Research Plan 3.0 op Status: Obligatory "field-specific" studies **ECTS Credits:** 3 credits Language of instruction: English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

766692J: Research Plan and Seminar, Seminar, 1 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: English

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

ECTS Credits: 1 ECTS credits Language of instruction: English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the course within two years of starting the doctoral training.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirements for the doctoral degrees established by UniOGS in Spring 2012 must complete the course within one year of transferring to the new requirements. The students should complete 920012J Research plan and seminar, plan, 3 ECTS credits as part of their application to transfer to the new requirements. **Learning outcomes:**

After the course the student knows how to present and discus his/her research progress in oral form, and has learned how to critically discuss the research of others.

Contents:

Public presentation of the research in the form of a public Research Plan Seminar, or a Research Seminar. **Mode of delivery:**

Personal work, oral presentation of the research.

Learning activities and teaching methods:

Presentation and discussion of the research plan, or the research progress, to senior scientists/professionals and doctoral students (Research Plan Seminar, or Research Seminar).

Target group:

Doctoral students registered in the University of Oulu Graduate School, obligatory "field-specific" studies

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended optional programme components:

No alternative course units or course units that should be completed simultaneously

Recommended or required reading:

Background literature of own research field.

Assessment methods and criteria:

Public presentation of the research plan/results in a Research (Plan) Seminar.

Read more about <u>assessment criteria</u> at the University of Oulu webpage.

Grading:

Pass/fail

Person responsible:

Responsible persons of the relevant Majors/fields of doctoral studies.

Working life cooperation:

No work placement period

Other information:

The study credit is awarded by the responsible person for the Field/Major, or a person designated by the latter, after the successful completion of the research plan seminar, or research seminar by the student.

764602J: Ph.D. Thesis in Biophysics, 0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. **Learning activities and teaching methods:** Annual meetings. **Assessment methods and criteria:** Evaluation of progress reports and plans. Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass / fail **Person responsible:** Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits:

- 1 ECTS credit Language of instruction:
- English
- Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:**

Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies

ECTS Credits:

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

748617J: Research Plan and Seminar, Seminar, 1 - 12 op

Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Biochemistry and Molecular Medicine Arvostelu: 1 - 5, pass, fail Opettajat: Tuomo Glumoff Opintokohteen kielet: English Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

748615J: Ph.D. Thesis in Biochemistry, 0 - 180 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Faculty of Biochemistry and Molecular Medicine Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions .

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet:

Status:

Obligatory "field-specific" studies **ECTS Credits:**

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Faculty of Medicine

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046002J: Dentistry, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English

Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction: English/Finnish

English/Fin Timinai

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status: Obligatory "field-specific" studies ECTS Credits: 3 credits Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement. **Learning outcomes:**

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

520023J: Research Plan and Seminar, Seminar, 1 op

Voimassaolo: 01.01.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Department of Electrical Engineering

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

520001J: Electrical Engineering, thesis, 0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Department of Electrical Engineering Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits:

1 ECTS

Language of instruction:

Language of meeting as appropriate, progress reports in English or Finnish.

Timing:

Once per year

Learning outcomes:

The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training.

Aiming to provide supplementary support for the doctoral training.

Contents:

Written and oral presentation reports and plans.

Learning activities and teaching methods:

Annual meetings.

- Assessment methods and criteria:
- Evaluation of progress reports and plans.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate

School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Jarmo Pulkkinen Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for responsible conduct of research by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about assessment criteria at the University of Oulu webpage.

Grading: pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies **ECTS Credits:**

3 credits

Language of instruction:

English (or other, when appropriate)

Timina:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second vear.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

520023J: Research Plan and Seminar, Seminar, 1 op

Voimassaolo: 01.01.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Department of Electrical Engineering

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

520001J: Electrical Engineering, thesis, 0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Department of Electrical Engineering Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS

Language of instruction:

Language of meeting as appropriate, progress reports in English or Finnish. Timing:

Once per year

Learning outcomes:

The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives:

Aiming to reflect own progress and plans of the doctoral training.

Aiming to provide supplementary support for the doctoral training.

Contents:

Written and oral presentation reports and plans.

Learning activities and teaching methods:

Annual meetings.

Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -**Opiskelumuoto:** Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing: The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or

after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and loans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School. **Recommended optional programme components:**

Recommended or required reading: Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria: Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. Grading: pass/fail Person responsible: Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies

ECTS Credits:

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible:

Supervisor, follow-up group and doctoral training committee

750662J: Research Plan and Seminar, Seminar, 1 - 2 op

Opiskelumuoto: Post-graduate Studies

Laji: Course

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: English

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Voidaan suorittaa useasti: Kyllä

ECTS Credits:

1 ECTS credits / 27 hours of work. Language of instruction: English. Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete parts 1 & 2 of the course during their first year of doctoral training. Part 3 of the course must be completed within two years of starting the doctoral training. All part-time students must complete parts 1, 2 & 3 of the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirements for the doctoral degrees established by UniOGS in Spring 2012 must complete parts 1 & 2 of the course as part of their application to transfer to the new requirements. Part 3 of the course must be completed within one year of transferring to the new requirements.

Learning outcomes:

After the course the student knows how to develop and present a doctoral training plan and research progress in written and oral forms, and has learned how to critically discuss the research of others. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

The course includes three parts:

Part one: The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan;

Part two: The presentation of the doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee; Part three: Public presentation of the research in the form of a public Research Plan Seminar

Parts 1 & 2, together, comprise 3 cr. Part 3 comprises 1 cr.

Mode of delivery:

Personal work, written and oral presentations

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written and oral presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Followup Group meeting) and doctoral students (Research Plan Seminar). Attendance of at least 10 seminars, of which two as an opponent.

Target group:

Compulsory to Ph.D. students.

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended optional programme components:

Recommended or required reading:

Background literature of own research field. Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee; public presentation of the research plan/results in a Research Plan Seminar.

Recording of the activities and credits: The three study credits for the completion of parts 1 and 2 are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student. The study credit for part 3 is awarded by the responsible person for the Field/Major, or a person designated by the latter, after the successful completion of the research plan seminar (based on list of attended seminars made by the student). Read more about <u>assessment criteria</u> at the University of Oulu webpage.

Grading: Pass / fail.

Person responsible:

Parts 1 & 2: Supervisor, follow-up group and doctoral training committee. Part 3: Responsible persons of the relevant Majors/fields of doctoral studies, Prof. Timo Muotka and Dr. Laura Kvist. **Working life cooperation:**

No.

Other information:

755617J: Ph.D. thesis in animal ecology, 180 op

Voimassaolo: - 31.07.2015

Opiskelumuoto: Post-graduate Studies

Laji: Defence of the Ph. D. thesis

Arvostelu: suor (pass), oiv (excellent), khy (excellent)

Opintokohteen kielet: English

Leikkaavuudet:

750671J Ph.D. thesis in biology 0.0 op

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits:

1 ECTS credit

Language of instruction:

English

Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies

ECTS Credits:

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

750662J: Research Plan and Seminar, Seminar, 1 - 2 op

Opiskelumuoto: Post-graduate Studies

Laji: Course

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: English

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

ECTS Credits:

1 ECTS credits / 27 hours of work.

Language of instruction:

English.

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete parts 1 & 2 of the course during their first year of doctoral training. Part 3 of the course must be completed within two years of starting the doctoral training. All part-time students must complete parts 1, 2 & 3 of the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirements for the doctoral degrees established by UniOGS in Spring 2012 must complete parts 1 & 2 of the course as part of their application to transfer to the new requirements. Part 3 of the course must be completed within one year of transferring to the new requirements.

Learning outcomes:

After the course the student knows how to develop and present a doctoral training plan and research progress in written and oral forms, and has learned how to critically discuss the research of others. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

The course includes three parts:

Part one: The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan;

Part two: The presentation of the doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee; Part three: Public presentation of the research in the form of a public Research Plan Seminar

Parts 1 & 2, together, comprise 3 cr. Part 3 comprises 1 cr.

Mode of delivery:

Personal work, written and oral presentations

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written and oral presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar). Attendance of at least 10 seminars, of which two as an opponent.

Target group:

Compulsory to Ph.D. students.

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended optional programme components:

Recommended or required reading:

Background literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee; public presentation of the research plan/results in a Research Plan Seminar.

Recording of the activities and credits: The three study credits for the completion of parts 1 and 2 are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student. The study credit for part 3 is awarded by the responsible person for the Field/Major, or a person designated by the latter, after the successful completion of the research plan seminar (based on list of attended seminars made by the student). Read more about <u>assessment criteria</u> at the University of Oulu webpage.

Grading:

Pass / fail.

Person responsible:

Parts 1 & 2: Supervisor, follow-up group and doctoral training committee. Part 3: Responsible persons of the relevant Majors/fields of doctoral studies, Prof. Timo Muotka and Dr. Laura Kvist.

Working life cooperation:

No.

Other information:

-

755619J: Ph.D. thesis in animal physiology, 180 op

Voimassaolo: - 31.07.2015

Opiskelumuoto: Post-graduate Studies

Laji: Defence of the Ph. D. thesis

Arvostelu: suor (pass), oiv (excellent), khy (excellent)

Opintokohteen kielet: English

Leikkaavuudet:

750671J Ph.D. thesis in biology 0.0 op

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -**Opiskelumuoto:** Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish **ECTS Credits:** 1 FCTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS. 920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits:

1 ECTS credit

Language of instruction: English

Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:**

Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Jarmo Pulkkinen Opintokohteen kielet: Finnish

ECTS Credits:
2 ECTS credits
Language of instruction:
English/Finnish
Timing:
The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status: Obligatory "field-specific" studies ECTS Credits: 3 credits Language of instruction: English (or other, when appropriate) Timing: All full-time students whose doctoral

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Followup Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

750662J: Research Plan and Seminar, Seminar, 1 - 2 op

Opiskelumuoto: Post-graduate Studies

Laji: Course

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: English

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Voidaan suorittaa useasti: Kyllä

ECTS Credits:

1 ECTS credits / 27 hours of work.

Language of instruction:

English.

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete parts 1 & 2 of the course during their first year of doctoral training. Part 3 of the course must be completed within two years of starting the doctoral training. All part-time students must complete parts 1, 2 & 3 of the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirements for the doctoral degrees established by UniOGS in Spring 2012 must complete parts 1 & 2 of the course as part of their application to transfer to the new requirements. Part 3 of the course must be completed within one year of transferring to the new requirements.

Learning outcomes:

After the course the student knows how to develop and present a doctoral training plan and research progress in written and oral forms, and has learned how to critically discuss the research of others. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

The course includes three parts:

Part one: The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan;

Part two: The presentation of the doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee; Part three: Public presentation of the research in the form of a public Research Plan Seminar Parts 1 & 2, together, comprise 3 cr. Part 3 comprises 1 cr.

Mode of delivery:

Personal work, written and oral presentations

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written and oral presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar). Attendance of at least 10 seminars, of which two as an opponent.

Target group:

Compulsory to Ph.D. students.

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended optional programme components:

Recommended or required reading:

Background literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee; public presentation of the research plan/results in a Research Plan Seminar.

Recording of the activities and credits: The three study credits for the completion of parts 1 and 2 are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student. The study credit for part 3 is awarded by the responsible person for the Field/Major, or a person designated by the latter, after the successful completion of the research plan seminar (based on list of attended seminars made by the student). Read more about assessment criteria at the University of Oulu webpage.

Grading:

Pass / fail.

Person responsible:

Parts 1 & 2: Supervisor, follow-up group and doctoral training committee. Part 3: Responsible persons of the relevant Majors/fields of doctoral studies, Prof. Timo Muotka and Dr. Laura Kvist. **Working life cooperation:**

No

Other information:

757609J: Ph.D. thesis in genetics, 180 op

Voimassaolo: - 31.07.2015

Opiskelumuoto: Post-graduate Studies

Laji: Defence of the Ph. D. thesis

Arvostelu: suor (pass), oiv (excellent), khy (excellent)

Opintokohteen kielet: English

Leikkaavuudet:

750671J Ph.D. thesis in biology 0.0 op

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timina: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems

related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria: Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. Grading:

pass/fail Person responsible:

Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Jarmo Pulkkinen Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits Language of instruction: English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for responsible conduct of research by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage. **Grading:** pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies ECTS Credits: 3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

750662J: Research Plan and Seminar, Seminar, 1 - 2 op

Opiskelumuoto: Post-graduate Studies

Laji: Course

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: English

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Voidaan suorittaa useasti: Kyllä

ECTS Credits:

1 ECTS credits / 27 hours of work. Language of instruction:

English.

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete parts 1 & 2 of the course during their first year of doctoral training. Part 3 of the course must be completed within two years of starting the doctoral training. All part-time students must complete parts 1, 2 & 3 of the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirements for the doctoral degrees established by UniOGS in Spring 2012 must complete parts 1 & 2 of the course as part of their application to transfer to the new requirements. Part 3 of the course must be completed within one year of transferring to the new requirements.

Learning outcomes:

After the course the student knows how to develop and present a doctoral training plan and research progress in written and oral forms, and has learned how to critically discuss the research of others. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

The course includes three parts:

Part one: The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan;

Part two: The presentation of the doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee; Part three: Public presentation of the research in the form of a public Research Plan Seminar

Parts 1 & 2, together, comprise 3 cr. Part 3 comprises 1 cr.

Mode of delivery:

Personal work, written and oral presentations

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written and oral presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group;

presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Followup Group meeting) and doctoral students (Research Plan Seminar). Attendance of at least 10 seminars, of which two as an opponent.

Target group:

Compulsory to Ph.D. students.

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended optional programme components:

Recommended or required reading:

Background literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee; public presentation of the research plan/results in a Research Plan Seminar.

Recording of the activities and credits: The three study credits for the completion of parts 1 and 2 are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student. The study credit for part 3 is awarded by the responsible person for the Field/Major, or a person designated by the latter, after the successful completion of the research plan seminar (based on list of attended seminars made by the student). Read more about <u>assessment criteria</u> at the University of Oulu webpage.

Grading:

Pass / fail.

Person responsible:

Parts 1 & 2: Supervisor, follow-up group and doctoral training committee. Part 3: Responsible persons of the relevant Majors/fields of doctoral studies, Prof. Timo Muotka and Dr. Laura Kvist. **Working life cooperation:**

No.

Other information:

756635J: Ph.D. thesis in plant ecology, 180 op

Voimassaolo: - 31.07.2015

Opiskelumuoto: Post-graduate Studies

Laji: Defence of the Ph. D. thesis

Arvostelu: suor (pass), oiv (excellent), khy (excellent)

Opintokohteen kielet: Finnish

Leikkaavuudet:

750671J Ph.D. thesis in biology 0.0 op

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year

Learning outcomes:

The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> criteria at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies ECTS Credits: 3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

750662J: Research Plan and Seminar, Seminar, 1 - 2 op

Opiskelumuoto: Post-graduate Studies

Laji: Course

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: English

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Voidaan suorittaa useasti: Kyllä

ECTS Credits:

1 ECTS credits / 27 hours of work. Language of instruction: English. Timing: All full-time students whose doctora

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete parts 1 & 2 of the course during their first year of doctoral training. Part 3 of the course must be completed within two years of starting the doctoral training. All part-time students must complete parts 1, 2 & 3 of the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirements for the doctoral degrees established by UniOGS in Spring 2012 must complete parts 1 & 2 of the course as part of their application to transfer to the new requirements. Part 3 of the course must be completed within one year of transferring to the new requirements.

Learning outcomes:

After the course the student knows how to develop and present a doctoral training plan and research progress in written and oral forms, and has learned how to critically discuss the research of others. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training. **Contents:**

The course includes three parts:

Part one: The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan;

Part two: The presentation of the doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee; Part three: Public presentation of the research in the form of a public Research Plan Seminar

Parts 1 & 2, together, comprise 3 cr. Part 3 comprises 1 cr.

Mode of delivery:

Personal work, written and oral presentations

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written and oral presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar). Attendance of at least 10 seminars, of which two as an opponent.

Target group:

Compulsory to Ph.D. students.

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended optional programme components:

Recommended or required reading:

Background literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee; public presentation of the research plan/results in a Research Plan Seminar.

Recording of the activities and credits: The three study credits for the completion of parts 1 and 2 are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student. The study credit for

part 3 is awarded by the responsible person for the Field/Major, or a person designated by the latter, after the successful completion of the research plan seminar (based on list of attended seminars made by the student). Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** Pass / fail. **Person responsible:** Parts 1 & 2: Supervisor, follow-up group and doctoral training committee. Part 3: Responsible persons of the relevant Majors/fields of doctoral studies, Prof. Timo Muotka and Dr. Laura Kvist. **Working life cooperation:** No. **Other information:**

756637J: Ph.D. thesis in plant physiology, 180 op

Voimassaolo: - 31.07.2015 Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish Leikkaavuudet: 750671J Ph.D. thesis in biology 0.0 op

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English ECTS Credits:

1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions .

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass/fail Person responsible:

Coordinators of the University

Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish Timina:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet:

Status:

Obligatory "field-specific" studies **ECTS Credits:**

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

682367J: Research Plan and Seminar, Seminar (English), 1 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Humanities Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

692004J: Doctoral dissertation (English), 0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Faculty of Humanities Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS. 920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English

Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction: English/Finnish

Englisn/Fin

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible: Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status: Obligatory "field-specific" studies ECTS Credits: 3 credits Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement. **Learning outcomes:**

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

780614J: Research Plan and Seminar, seminar, 1 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

785610J: Ph.D. Thesis in Inorganic Chemistry, 0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English

Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition;

transportation; sport activities; Student associations; Student cards; Grants and loans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.
 Learning activities and teaching methods:
 obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h.
 Prerequisites and co-requisites:
 The student must have been admitted to the University of Oulu Graduate School.
 Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -**Opiskelumuoto:** Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies ECTS Credits:

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Followup Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee. The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student. Read more about assessment criteria at the University of Oulu webpage. **Grading:** pass / fail **Person responsible:**

Supervisor, follow-up group and doctoral training committee

780614J: Research Plan and Seminar, seminar, 1 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

786610J: Ph.D. Thesis in Physical Chemistry, 0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing: The course is held once in the

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions .

Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:**

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies ECTS Credits: 3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

780614J: Research Plan and Seminar, seminar, 1 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

787610J: Ph.D. Thesis in Organic Chemistry, 0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -**Opiskelumuoto:** Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish **ECTS Credits:** 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English

ECTS Credits:

1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Jarmo Pulkkinen Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status: Obligatory "field-specific" studies ECTS Credits: 3 credits Language of instruction: English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-

up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

780614J: Research Plan and Seminar, seminar, 1 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

788610J: Ph.D. Thesis in Structural Chemistry, 0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -**Opiskelumuoto:** Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish **ECTS Credits:** 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:**

Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School. **Recommended or required reading:** Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity. **Assessment methods and criteria:** Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Jarmo Pulkkinen (e-mail: **firstname.lastname (at) oulu.fi**)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status: Obligatory "field-specific" studies ECTS Credits:

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Medicine Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046001J: Medicine, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Medicine Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS

Language of instruction:

Language of meeting as appropriate, progress reports in English or Finnish. **Timing:**

Once per year Learning outcomes:

The student is able to report effectively on the plans and accomplishments of his/her training.

The student is able to reflect on his/her training.

Course objectives:

Aiming to reflect own progress and plans of the doctoral training.

Aiming to provide supplementary support for the doctoral training.

Contents:

Written and oral presentation reports and plans.

Learning activities and teaching methods:

Annual meetings.

Assessment methods and criteria: Evaluation of progress reports and plans. Read more about <u>assessment criteria</u> at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing: The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or

after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School. **Recommended optional programme components:**

Recommended or required reading: Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria: Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. Grading: pass/fail Person responsible: Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies

ECTS Credits:

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass / fail **Person responsible:** Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Medicine Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

356001J: Health Sciences, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans.

Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass / fail **Person responsible:**

Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits:

1 ECTS credit

Language of instruction: English

Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and loans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions .

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction: English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies

ECTS Credits:

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

520023J: Research Plan and Seminar, Seminar, 1 op

Voimassaolo: 01.01.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Department of Electrical Engineering

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

520001J: Electrical Engineering, thesis, 0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Department of Electrical Engineering Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -**Opiskelumuoto:** Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish **ECTS Credits:** 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training.

Aiming to provide supplementary support for the doctoral training.

Contents:

Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail

Person responsible:

Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

ECTS Credits:

1 ECTS credit

Language of instruction:

English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Jarmo Pulkkinen Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits Language of instruction: English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail **Opintokohteen kielet:** Finnish Leikkaavuudet: 920004J-01 Research Plan and Seminar, Research Plan 3.0 op Status: Obligatory "field-specific" studies **ECTS Credits:** 3 credits Language of instruction: English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Faculty of Medicine

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

356001J: Health Sciences, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish Voimassaolo: 01.08.2012 -

920007J: Follow-up Group Reporting and meetings, 1 op

Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail **Opintokohteen kielet:** Finnish ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions .

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass/fail Person responsible:

Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits Language of instruction: English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status: Obligatory "field-specific" studies ECTS Credits: 3 credits Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Faculty of Medicine

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

356001J: Health Sciences, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English

Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction: English/Finnish

Timina:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies

ECTS Credits:

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee. The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student. Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass / fail **Person responsible:** Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Medicine Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

356001J: Health Sciences, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing: The course is held once in t

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions .

Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:**

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies ECTS Credits: 3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Medicine Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

356001J: Health Sciences, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -**Opiskelumuoto:** Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish **ECTS Credits:** 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits:

1 ECTS credit

Language of instruction:

English

Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Jarmo Pulkkinen Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction: English/Finnish

Timina:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status: Obligatory "field-specific" studies ECTS Credits: 3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Faculty of Medicine

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

356001J: Health Sciences, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training. **Learning outcomes:**

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits Language of instruction: English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status: Obligatory "field-specific" studies ECTS Credits: 3 credits Language of instruction: English (or other, when appropriate) Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Faculty of Medicine

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

356001J: Health Sciences, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English

Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction: English/Finnish

Timina:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies

ECTS Credits:

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee. The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student. Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass / fail **Person responsible:** Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Medicine Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

356001J: Health Sciences, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing: The course is held once in the

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions .

Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:**

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies ECTS Credits: 3 credits

Janguage of inst

Language of instruction: English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

480023J: Research Plan and Seminar, Seminar, 1 - 4 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Field of Process and Environmental Engineering Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

480001J: Environmental Engineering, thesis, 0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Field of Process and Environmental Engineering Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible:

Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits:

1 ECTS credit

Language of instruction:

English

Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions .

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Jarmo Pulkkinen

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies

ECTS Credits:

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

460023J: Research Plan and Seminar, Seminar, 1 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Field of Mechanical Engineering

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

460001J: Mechanical Engineering, thesis, 0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Field of Mechanical Engineering Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -**Opiskelumuoto:** Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish **ECTS Credits:** 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing: The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and loans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Jarmo Pulkkinen Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits Language of instruction: English/Finnish Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research. **Contents:**

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods: General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status: Obligatory "field-specific" studies ECTS Credits: 3 credits Language of instruction: English (or other, when appropriate) Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement. **Learning outcomes:**

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

550023J: Research Plan and Seminar, Seminar, 1 op

Voimassaolo: 01.01.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Field of Industrial Engineering and Management

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

550001J: Industrial Engineering and Management, thesis, 0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Field of Industrial Engineering and Management Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits:

1 ECTS

Language of instruction:

Language of meeting as appropriate, progress reports in English or Finnish.

Timing:

Once per year

Learning outcomes:

The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. **Learning activities and teaching methods:** Annual meetings. **Assessment methods and criteria:** Evaluation of progress reports and plans.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing: The course is held once in the

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate

School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Jarmo Pulkkinen Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for responsible conduct of research by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about assessment criteria at the University of Oulu webpage.

Grading: pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies **ECTS Credits:**

3 credits

Language of instruction:

English (or other, when appropriate)

Timina:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second vear.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

521023J: Research Plan and Seminar, Seminar, 1 op

Voimassaolo: 01.01.2010 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Department of Computer Science and Engineering

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

521001J: Information Engineering, thesis, 0 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Department of Computer Science and Engineering Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits:

1 ECTS

Language of instruction:

Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail

Person responsible:

Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English ECTS Credits:

1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School. **Recommended optional programme components:**

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies **ECTS Credits:**

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass / fail **Person responsible:** Supervisor, follow-up group and doctoral training committee

522023J: Research Plan and Seminar, Seminar, 1 op

Voimassaolo: 01.01.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Department of Electrical Engineering Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

522001J: Telecommunication Engineering, thesis, 0 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Department of Electrical Engineering Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish **ECTS Credits:** 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods:

Annual meetings. **Assessment methods and criteria:** Evaluation of progress reports and plans. Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass / fail **Person responsible:** Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit

Language of instruction:

English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:**

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies

ECTS Credits: 3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

460023J: Research Plan and Seminar, Seminar, 1 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Field of Mechanical Engineering

Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar

Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

460001J: Mechanical Engineering, thesis, 0 op

1.0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Field of Mechanical Engineering Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

Voimassaolo: 01.08.2012 -

Laji: Course

Opiskelumuoto: Post-graduate Studies

920007J: Follow-up Group Reporting and meetings, 1 op

Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish **ECTS Credits:** 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits:

1 ECTS credit Language of instruction:

English

Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Jarmo Pulkkinen Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for responsible conduct of research by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -**Opiskelumuoto:** Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail **Opintokohteen kielet:** Finnish Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status: Obligatory "field-specific" studies **ECTS Credits:** 3 credits Language of instruction:

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

520023J: Research Plan and Seminar, Seminar, 1 op

Voimassaolo: 01.01.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Department of Electrical Engineering

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

520001J: Electrical Engineering, thesis, 0 op

Opiskelumuoto: Post-graduate Studies **Laji:** Defence of the Ph. D. thesis

Vastuuyksikkö: Department of Electrical Engineering Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish **ECTS Credits:** 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training.

Contents:

Written and oral presentation reports and plans.

Learning activities and teaching methods:

Annual meetings.

Assessment methods and criteria:

Evaluation of progress reports and plans.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail **Person responsible:**

Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing: The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits Language of instruction: English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status: Obligatory "field-specific" studies ECTS Credits: 3 credits Language of instruction: English (or other, when appropriate) Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

520023J: Research Plan and Seminar, Seminar, 1 op

Voimassaolo: 01.01.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Department of Electrical Engineering

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

520001J: Electrical Engineering, thesis, 0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Department of Electrical Engineering Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition;

transportation; sport activities; Student associations; Student cards; Grants and loans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.
 Learning activities and teaching methods:
 obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h.
 Prerequisites and co-requisites:
 The student must have been admitted to the University of Oulu Graduate School.
 Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -**Opiskelumuoto:** Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies ECTS Credits:

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Followup Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee. The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student. Read more about assessment criteria at the University of Oulu webpage. **Grading:**

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

460023J: Research Plan and Seminar, Seminar, 1 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Field of Mechanical Engineering Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

460001J: Mechanical Engineering, thesis, 0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Field of Mechanical Engineering Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. **Learning activities and teaching methods:** Annual meetings. **Assessment methods and criteria:** Evaluation of progress reports and plans. Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass / fail **Person responsible:** Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria: Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. Grading: pass/fail Person responsible: Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction: English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies

ECTS Credits:

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Field of Mechanical Engineering Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

460001J: Mechanical Engineering, thesis, 0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Field of Mechanical Engineering Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible:

Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions .

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet:

Status:

Obligatory "field-specific" studies **ECTS Credits:**

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

470023J: Research Plan and Seminar, Seminar, 1 op

Voimassaolo: 01.01.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Field of Process and Environmental Engineering

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

470001J: Process Engineering, thesis, 0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Field of Process and Environmental Engineering Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits:

1 ECTS

Language of instruction:

Language of meeting as appropriate, progress reports in English or Finnish.

Timing:

Once per year

Learning outcomes:

The student is able to report effectively on the plans and accomplishments of his/her training.

The student is able to reflect on his/her training.

Course objectives:

Aiming to reflect own progress and plans of the doctoral training.

Aiming to provide supplementary support for the doctoral training.

Contents:

Written and oral presentation reports and plans.

Learning activities and teaching methods:

Annual meetings.

Assessment methods and criteria:

Evaluation of progress reports and plans.

Read more about assessment criteria at the University of Oulu webpage.

```
Grading:
```

pass / fail

Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction:

English

Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits Language of instruction: English/Finnish Timing: The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies. Learning outcomes: After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status: Obligatory "field-specific" studies ECTS Credits: 3 credits Language of instruction: English (or other, when appropriate) Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

460023J: Research Plan and Seminar, Seminar, 1 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Field of Mechanical Engineering

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

460001J: Mechanical Engineering, thesis, 0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Field of Mechanical Engineering Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -**Opiskelumuoto:** Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish **ECTS Credits:** 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry

Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions .

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School. **Recommended or required reading:** Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity. **Assessment methods and criteria:** Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Jarmo Pulkkinen (e-mail: **firstname.lastname (at) oulu.fi**)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status: Obligatory "field-specific" studies ECTS Credits: 3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

460023J: Research Plan and Seminar, Seminar, 1 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Field of Mechanical Engineering Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

460001J: Mechanical Engineering, thesis, 0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Field of Mechanical Engineering Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits:

1 ECTS

Language of instruction:

Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail

Person responsible:

Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English ECTS Credits:

1 ECTS credits: 1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School. **Recommended optional programme components:**

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> criteria at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies **ECTS Credits:**

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass / fail **Person responsible:** Supervisor, follow-up group and doctoral training committee

460023J: Research Plan and Seminar, Seminar, 1 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Field of Mechanical Engineering Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-02 Research Plan and Seminar, seminar 1.0 op Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

460001J: Mechanical Engineering, thesis, 0 op

Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Field of Mechanical Engineering Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. Contents: Written and oral presentation reports and plans. Learning activities and teaching methods:

Annual meetings.

Assessment methods and criteria: Evaluation of progress reports and plans. Read more about <u>assessment criteria</u> at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English

ECTS Credits: 1 ECTS credit Language of instruction: English Timing: The course is held once in the

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions .

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Jarmo Pulkkinen

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for <u>responsible conduct of research</u> by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status:

Obligatory "field-specific" studies

ECTS Credits:

3 credits

Language of instruction:

English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Followup Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Faculty of Medicine

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

046001J: Medicine, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Vastuuyksikkö: Medicine Arvostelu: suor (pass), oiv (excellent), khy (excellent) Opintokohteen kielet: English

Ei opintojaksokuvauksia.

920007J: Follow-up Group Reporting and meetings, 1 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish **ECTS Credits:** 1 ECTS Language of instruction: Language of meeting as appropriate, progress reports in English or Finnish. Timing: Once per year Learning outcomes: The student is able to report effectively on the plans and accomplishments of his/her training. The student is able to reflect on his/her training. Course objectives: Aiming to reflect own progress and plans of the doctoral training. Aiming to provide supplementary support for the doctoral training. **Contents:** Written and oral presentation reports and plans. Learning activities and teaching methods: Annual meetings. Assessment methods and criteria: Evaluation of progress reports and plans. Read more about assessment criteria at the University of Oulu webpage. Grading: pass / fail Person responsible: Chair of the Follow-up Group and Coorninators of UniOGS.

920001J: Introduction to Doctoral Training, 1 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Niina Timosaari-Hyry Opintokohteen kielet: English

ECTS Credits:

1 ECTS credit Language of instruction: English Timing:

The course is held once in the spring and once in the autumn. All students whose doctoral study rights started on, or after 1 January 2012 must attend the course during their first year of doctoral training.

Learning outcomes:

After the course the student knows about the structure and practices of UniOGS, as well as practical information regarding the formalities, general requirements and opportunities, and services, essential to both their doctoral studies and every-day life.

Contents:

The course includes an obligatory component for all first-year doctoral students, and an optional component targeted to foreign students and Finnish students arriving from outside of Oulu.

The obligatory component addresses the following topics: Requirements for obtaining a doctoral degree; Graduate school structure, responsible persons/services, and bylaws/regulations; General procedures and time-line of the doctoral education; What students can expect from UniOGS and their research environment, and what the Graduate School and the research environment expect from the students; Procedures for addressing and redressing problems related to doctoral training. General instructions on the use of administrative data bases (Sole, ESS, Travel, Personec, Optima, Oodi, etc.).

The optional component covers the following topics: Formalities for foreign students from within and outside the E. U; Legal services and taxes; Library services; E-mail and internet access; health & social services day-care, nutrition; transportation; sport activities; Student associations; Student cards; Grants and Ioans; Useful contact data and web addresses for further information.

Mode of delivery:

lectures, discussions and networking.

Learning activities and teaching methods:

obligatory lectures and discussion, 7,5 h; optional lectures and discussion, 8h; networking and personal study, 11 h. **Prerequisites and co-requisites:**

The student must have been admitted to the University of Oulu Graduate School.

Recommended optional programme components:

Recommended or required reading:

Students should familiarize themselves with the contents of the University of Oulu Graduate School web site.

Assessment methods and criteria:

Participation in lectures and discussions . Read more about <u>assessment criteria</u> at the University of Oulu webpage. **Grading:** pass/fail **Person responsible:** Coordinators of the University of Oulu Graduate School

920002J: Scientific Research and Ethics, 2 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Jarmo Pulkkinen Opintokohteen kielet: Finnish

ECTS Credits: 2 ECTS credits

Language of instruction:

English/Finnish

Timing:

The course unit is held once in the autumn (in English) and once in the spring (in Finnish). It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student is familiar with the ethical codes of research, and able to recognise and analyse ethical problems relating to different fields and stages of research.

Contents:

Ethical theory and ethical problem solving. Professional ethics. Ethical problems characteristic to different sciences. Good scientific practice and procedures for handling misconduct and fraud in science. Ethical problems regarding the relation between science community and wider society. Research method.

Mode of delivery:

lectures, group work and seminar.

Learning activities and teaching methods:

General ethics lectures (8 h.), field-specific topics (6 h.), group work and seminar. Regular attendance of lectures, participation in group work and oral presentation.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Student should familiarize themselves with the guidelines for responsible conduct of research by the Finnish Advisory Board on Research Integrity.

Assessment methods and criteria:

Regular attendance of lectures, participation in group work and oral presentation. Read more about <u>assessment</u> <u>criteria</u> at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Jarmo Pulkkinen (e-mail: firstname.lastname (at) oulu.fi)

920014J: Midterm checkpoint, 0 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920012J: Research Plan and Seminar, Plan, 3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Leikkaavuudet: 920004J-01 Research Plan and Seminar, Research Plan 3.0 op

Status: Obligatory "field-specific" studies ECTS Credits: 3 credits Language of instruction: English (or other, when appropriate)

Timing:

All full-time students whose doctoral study rights started on, or after 1 January 2012 must complete the the course during their first year of doctoral training. All part-time students must complete the course before the end of the second year.

All doctoral students registered in the University of Oulu Graduate School who were awarded doctoral study rights before 1st August 2011, but who wish to follow the new requirement fot the doctoral degrees established by UniOGS in Spring 2012 must complete the course as part of their application to transfer to the new requirement.

Learning outcomes:

After the course the student knows how to develop a doctoral training plan and research progress in written. The student has established a realistic four-year plan (including content, schedule and funding) for his/her doctoral training.

Contents:

3 ECTS credits. The establishment and writing of the full doctoral training plan, which includes detailed research and study plans. The student should also include a brief outline of his/her career development plan; the presentation of hte doctoral training plan to, and its recommendation for acceptance by, the student's Doctoral Training Follow-up Group. The plan is formally accepted by the student's Doctoral Training Committee.

Mode of delivery:

Personal work, written presentation.

Learning activities and teaching methods:

Establishment and writing of the doctoral training plan, its written presentation to the Doctoral Training Follow-up Group, and its eventual revision following the recommendations of the Doctoral Training Follow-up Group; presentation and discussion of the research plan, or the research progress, to senior scientists/professionals (Follow-

up Group meeting) and doctoral students (Research Plan Seminar, or Research Seminar).

Prerequisites and co-requisites:

The student must have been granted study rights for doctoral training at the University of Oulu Graduate School and must have a Doctoral Training Follow-up Group.

Recommended or required reading:

Backgroud literature of own research field.

Assessment methods and criteria:

Submission and approval of the full doctoral training plan by the doctoral training follow-up group; acceptance of the doctoral training plan by the student's Doctoral Training Committee.

The three study credits for the completion are awarded when the Doctoral Training Committee has approved the full doctoral training plan of the student.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass / fail

Person responsible:

Supervisor, follow-up group and doctoral training committee

046034J: Research plan and seminar, seminar, 1 op

Voimassaolo: 01.01.2013 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: Faculty of Medicine

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

920004J-02 Research Plan and Seminar, seminar 1.0 op

Ei opintojaksokuvauksia.

356001J: Health Sciences, thesis, 0 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Defence of the Ph. D. thesis Arvostelu: suor (pass), oiv (excellent), khy (excellent) Ei opintojaksokuvauksia.

Tutkintorakenteisiin kuulumattomien opintokokonaisuuksien ja -jaksojen kuvaukset

722130J: ACC, Major Subject Studies, 0 - 10 op

Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Oulu Business School Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

722131J: ACC, Major Subject Studies, Financial Accounting, 0 - 10 op

Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Oulu Business School Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

722132J: ACC, Major Subject Studies, Management Accounting, 0 - 10 op

Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Oulu Business School Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

722133J: ACC, Major Subject Studies, Special Issue, 0 - 10 op

Voimassaolo: 01.10.1950 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Oulu Business School Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

722100J: ACC, Research Methodology, 0 - 10 op

Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Oulu Business School Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

722101J: ACC, Research Methodology, Research Methods, 0 - 10 op

Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Oulu Business School Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

046020J: Analysing statistical data by the R language, 1,5 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Medicine Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

046014J: Basic statistical methods in medicine, 3 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Medicine Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

046017J: Basics of Medical Information, 1 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Medicine Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920005J: Basics of University Pedagogy for Doctoral Students, 2 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Post-graduate Studies

Laji: Course

Vastuuyksikkö: University of Oulu Graduate School, UniOGS

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli Ruotsalainen

Opintokohteen kielet: Finnish

Leikkaavuudet:

748624J Basic course in teaching biochemistry 2.0 op

ECTS Credits:

2 ECTS

Language of instruction: English / Finnish

Timing:

The course is given in the autumn and spring terms. A maximum of 60 students in spring 2014. The participants should already have some teaching experience. This is an optional course.

Learning outcomes:

Course objectives:

The course aims to reinforce the doctoral student's interest in the teaching profession and student-centred teaching and to support the construction of his/her professional identity.

Learning outcomes:

- The student knows how to use reflection as a tool to develop his/her own work. S/he identifies and knows how to analyse the strengths and areas needing development in his/her activities. S/he knows how to do self- and peer-assessment and make use of feedback received.
- The student knows how to plan his/her teaching based on the principles of aligned teaching as regards goal setting, content definition, teaching method selection and learning assessment.

Contents:

- Competence areas of university teachers
- Reflection
- Teachers' professional identity
- Aligned teaching
- Research-based teaching
- Student and peer feedback

Learning activities and teaching methods:

2 h of lectures, 14 h of activity-based group sessions in groups of 12-20, 37 h of independent work. Independent work includes advance and interim assignments, peer observation of teaching and keeping a learning diary.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Lindblom-Ylänne, S. & Nevgi, A. 2009. (eds.) Yliopisto-opettajan käsikirja. Helsinki: WSOYpro Oy (applicable parts). Also 1 article chosen by the student from the following journals: Studies in Higher Education, Higher Education, Teaching and Teacher Education, Teaching in Higher Education , Educational Research Review, Higher Education Research and Development, Journal of Academic Development, Kasvatus, Aikuiskasvatus and Yliopistopedagogiikka (formerly Peda-forum -lehti).

Assessment methods and criteria:

Active presence in lectures and group teaching, learning diary. Grading:

Pass / Fail Person responsible:

Professor Raimo Kaasila, trainer in university pedagogy Merja Maikkola, university lecturer Jani Kukkola and UniOGS coordinator Minna Silfverhuth.

046029J: Basics of research in clinical epidemiology, 3,3 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Medicine Arvostelu: 1 - 5, pass, fail Opettajat: Juha Auvinen Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

046012J: Basics of scientific communication, exercise, 1,5 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Medicine Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

046011J: Basics of scientific communication, lectures, 1,5 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Medicine Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

920011J: Communicating Science to the Media, General Public and Decision Makers, 1 op

Voimassaolo: 01.01.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Räsänen, Satu Hannele Opintokohteen kielet: Finnish

ECTS Credits: 1 ECTS credit Language of instruction:

English and Finnish

Timing:

The course is held both in English and Finnish once during the autumn and once during the spring term. The couse is recommended to the graduate students at the end of their doctoral studies.

Learning outcomes:

A student is aware of his/her possibilities and responsibilities in communicating about research and issues related to the field of science. He/she is able to write an interesting media release.

Contents:

What is science communication, public undestanding of science and science journalism? Who popularizes science, why and to whom? Is it appropriate to be a popular media scientist? Can science be entertaining? **Mode of delivery:**

Attendance of lectures, participating discussions, team work and rehearsals.

Learning activities and teaching methods:

Attending the course 2 x 6 hours, writing a press release.

Prerequisites and co-requisites:

The student must have been admitted to the University of Oulu Graduate School.

Recommended or required reading:

Relevant reading will be distributed in the beginning of the course.

Assessment methods and criteria:

Attendentig the lectures and writing a press release.

Grading:

Pass / fail

Person responsible:

Coordinator Anthony Heape, Satu Räsänen

046018J: Computer-based statistical processing of material, 1 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Medicine Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

520020J: Conference, 0,5 - 2 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Department of Electrical Engineering Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

521020J: Conference, 0,5 - 2 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Department of Computer Science and Engineering Arvostelu: 1 - 5, pass, fail Ei opintojaksokuvauksia.

460020J: Conference, 0,5 - 2 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Field of Mechanical Engineering Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

722002J: Conference, 0,5 - 2 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Oulu Business School Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

419112J: Conference, 0,5 - 2 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Education Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

ECTS Credits: 0,5-2 ECTS / 13,5-54 hours of work Language of instruction: Language is that of the conference / seminar. Timing: No specific timing. Learning outcomes: Upon completion of the course, the student will have familiarized him/herself with contents and themes of the conference / seminar in question. Contents: Contents and themes of the conference / seminar in question. Mode of delivery: Independent work. Learning activities and teaching methods: National conference: poster or paper presentation

International conference: poster or paper presentation Organising a conference Attending a scientific seminar Target group: PhD students Prerequisites and co-requisites: No **Recommended or required reading:** No specific materials. Assessment methods and criteria: Presenting a poster or a paper in a conference, or organising a conference, or attending a scientific seminar. Grading: The course is graded with pass / fail. Person responsible: Dean of Research Working life cooperation: No

046031J: Conference, 0,5 - 4 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Medicine Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

450020J: Conference, 0,5 - 2 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Oulu School of Architecture Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

480020J: Conference, 0,5 - 2 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Field of Process and Environmental Engineering Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

470020J: Conference, 0,5 - 2 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Field of Process and Environmental Engineering Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

694932J: Conference (Finnish Language), 0,5 - 2 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Humanities Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

693457J: Conference (German Language and Culture), 0,5 - 2 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Humanities Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

694639J: Conference (Information Studies), 0,5 - 2 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Humanities Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

694786J: Conference (Logopedics), 0,5 - 2 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Humanities Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

693679J: Conference (Swedish Language), 0,5 - 2 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Humanities Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

722331J: ECON, Major Subject Studies, Macroeconomic Theory, 0 - 10 op

Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Oulu Business School Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

722330J: ECON, Major Subject Studies, Microeconomic Theory, 0 - 10 op

Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Oulu Business School Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

722332J: ECON, Major Subject Studies, Special Issues, 0 - 10 op

Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Oulu Business School Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

722300J: ECON, Research Methodology, Methodology and History of Economic Thought, 0 - 10 op

Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Oulu Business School Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

722301J: ECON, Research Methodology, Research Methods, 0 - 10 op

Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Oulu Business School Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

520010J: Electrical Engineering, postgraduate course, 0 - 59,5 op

Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Department of Electrical Engineering Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

520011J: Electrical Engineering, postgraduate literature and written exam, 0 - 34 op

Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Department of Electrical Engineering Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

046016J: English for Medical Conferences and Scientific Writing, 1,5 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Medicine Ei opintojaksokuvauksia.

722930J: FIN, Major Subject Studies, 0 op

Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Oulu Business School Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

722901J: FIN, Research Methodology, Dissertation Analysis, 0 - 10 op

Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Oulu Business School Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

722900J: FIN, Research Methodology, Methodology, 0 - 10 op

Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Oulu Business School Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

722902J: FIN, Research Methodology, Research Methods, 0 - 10 op

Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Oulu Business School Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

046019J: Faculty of Medicine Science Day, 0,3 - 1 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Medicine Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

419116J: Field Specific Content, 1 - 22 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Education Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

ECTS Credits: 16-22 ECTS / 432-594 hours of work Language of instruction: Not specified. Timing: Not specified. Learning outcomes: Upon completion of the course, the student is familiar with the field specific contents relevant to his/her PhD thesis. **Contents:** Field specific contents. Mode of delivery: Independent work and/or contact teaching and/or exam and/or essay. Learning activities and teaching methods: Not specified. Target group: PhD students Prerequisites and co-requisites: No **Recommended or required reading:** No specific materials. Assessment methods and criteria: Not specified. Grading: The course is graded with pass / fail, or 1-5. Person responsible: Dean of Research Working life cooperation: No

419117J: Field Specific Methodology, 1 - 22 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Education Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

ECTS Credits: 16-22 ECTS credits Language of instruction: Not specified Timing: Not specified Learning outcomes: Upon completion of the course, the student is familiar with the field specific methodologies relevant to his/her PhD thesis. **Contents:** Field specific methodological contents. Mode of delivery: Independent work and/or contact teaching and/or exam and/or essay. Learning activities and teaching methods: Not specified. Target group: PhD students Prerequisites and co-requisites: No **Recommended or required reading:** No specific materials. Assessment methods and criteria: Not specified. Grading: The course is graded with pass / fail, or 1-5. Person responsible: Dean of Research Working life cooperation: No

722630J: IB, Major Subject Studies, 0 - 10 op

Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Oulu Business School Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

722631J: IB, Major Subject Studies, Specialisation Studies in International Business, 0 - 10 op

Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Oulu Business School Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

920003J: Information skills for doctoral students, 2 op

Voimassaolo: 01.08.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heli Ruotsalainen, Tiina Sipola Opintokohteen kielet: Finnish

ECTS Credits:

1 ECTS credit Language of instruction: English

Timing:

The course unit is held in the autumn and in the spring term. It is recommended to take the course at the beginning of the doctoral studies.

Learning outcomes:

After the course the student knows the most relevant databases of her/his discipline, knows how to conceptualize her/his research subject into search terms and manages the process of systematic information retrieval. She/he masters the use of alert services. The student can critically evaluate different information sources and can take into account evaluation based on academic publishing on his/her research. The student can use RefWorks - reference manager.

Contents:

The process of systematic information retrieval. Relevant databases of the discipline. Information retrieval/search on student's own research subject. Saving searches and alert services. RefWorks. Evaluation based on academic publishing: e.g. journal Impact Factor. Copyright issues.

Mode of delivery:

classroom instruction, homework

Learning activities and teaching methods:

classroom teaching 14h, self-study 13h

Target group: Doctoral students Prerequisites and co-requisites: It is recommended that the student knows the basic services of Oulu University Library. The student can participate in the Library ABC –training (2 h) that is organized before the current course

Recommended or required reading:

Following library guides:

Finding scientific information http://libguides.oulu.fi/findinginformation Evaluation based on scientific publishing http://libguides.oulu.fi/evaluatingpublications Research visibility http://libguides.oulu.fi/researchvisibility

Assessment methods and criteria:

Participation in classroom teaching and successful completion of the course assignments.

722730J: LOG, Major Subject Studies, Logistics Theory and History, 0 - 10 op

Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Oulu Business School Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

722732J: LOG, Major Subject Studies, Special Issue in Logistics, 0 - 10 op

Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Oulu Business School Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

722731J: LOG, Major Subject Studies, Specialisation Studies in Logistics, 0 - 10 op

Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Oulu Business School Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

722530J: MAN&ORG, Major Subject Studies, Management Theory and History, 0 - 10 op

Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Oulu Business School Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

722532J: MAN&ORG, Major Subject Studies, Special Issues in Management and Organization, 0 - 10 op

Opiskelumuoto: Post-graduate Studies

Laji: Course Vastuuyksikkö: Oulu Business School Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

722531J: MAN&ORG, Major Subject Studies, Specialisation Studies in Management and Organization, 0 - 10 op

Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Oulu Business School Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

722430J: MAR, Major subject studies, Marketing Theory and History, 0 - 10 op

Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Oulu Business School Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

722432J: MAR, Major subject studies, Special Issues in Marketing, 0 - 10 op

Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Oulu Business School Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

722431J: MAR, Major subject studies, Specialisation Studies in Marketing, 0 - 10 op

Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Oulu Business School Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

722400J: MAR, Research Methodology, 0 - 10 op

Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Oulu Business School Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

450021J: Research Visit, 0,5 - 2 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Oulu School of Architecture Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

460021J: Research Visit, 0,5 - 2 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Field of Mechanical Engineering Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

470021J: Research Visit, 0,5 - 2 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Field of Process and Environmental Engineering Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

419113J: Research Visit, 0,5 - 2 op

Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Education Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä ECTS Credits: 0,5-2 ECTS / 13,5-54 hours of work Language of instruction: Not specified. Timing: No specific timing. Learning outcomes: Upon completion of the course, the student will have familiarized him/herself with ongoing research in the host institution. Contents: Will be agreed on separately between the student, his/her supervisor and the host institution. Mode of delivery: Independent work. Learning activities and teaching methods: Visiting a national or an international research centre. Target group: PhD students. Prerequisites and co-requisites: No prerequisites. **Recommended or required reading:** No specific materials. Assessment methods and criteria: The visit and a report thereof, compiled as instructed by the supervisor. Grading: pass/fail Person responsible: Dean of Research Working life cooperation: No

046032J: Research Visit, 0,5 - 10 op

Voimassaolo: 01.08.2013 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Medicine Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

Voimassaolo: 01.08.2012 -

722003J: Research Visit, 0,5 - 2 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Oulu Business School Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

480021J: Research Visit, 0,5 - 2 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Field of Process and Environmental Engineering Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

521021J: Research Visit, 0,5 - 2 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Department of Computer Science and Engineering Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

520021J: Research Visit, 0,5 - 2 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Department of Electrical Engineering Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

046028J: Research planning, 2 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Faculty of Medicine Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

920010J: Scientific Communication, 0,5 op

Voimassaolo: 01.01.2011 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: University of Oulu Graduate School, UniOGS Arvostelu: 1 - 5, pass, fail Opettajat: Heape Martin, Belt, Pekka Juhani Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

ECTS Credits: 0,5 ECTS credit Language of instruction: Finnish / English Timing: once during spring and once during autumn

Learning outcomes:

This course provides students with understanding over efficient writing of scientific journal articles and doctoral dissertations. The course will motivate students to start writing sooner.

After this course the student will understand what is required from scientific journal articles and doctoral dissertations and what the related publishing processes entail. The student will know the typical structures of scientific articles and doctoral dissertations and how to write effectively.

Contents:

Students must attend at least two different lectures from the list below to pass the course and obtain the study credits:

- 1. Writing scientific journal articles
- 2. Writing a doctoral dissertation

3. Writing the compiling part of a compilation dissertation

Mode of delivery:

The course includes lectures and 5 hours of personal work.

Learning activities and teaching methods:

The course includes lectures and 5 hours of personal work. Each lecture is 4x45min in length arranged as a single half-day session.

Personal work includes preparing and consolidating the topics treated during the lectures. This may mean familiarizing with the guidebooks provided as study material, analyzing articles in your target journal and/or analyzing doctoral dissertations in your own field by comparing them against the structures presented during this course.

Recommended or required reading:

Study materials:

(Available at www.tinyurl.com/efficient-doctoral-studies)

Tips for writing scientific journal articles Practical tips for doctoral students

Tips for writing scientific journal articles

Practical tips for doctoral students

Assessment methods and criteria: Read more about <u>assessment criteria</u> at the University of Oulu webpage. Grading: pass / fail Person responsible: Dr Pekka Belt

480022J: Teaching Tasks, 0 - 5 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Field of Process and Environmental Engineering Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

470022J: Teaching Tasks, 0 - 5 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Field of Process and Environmental Engineering Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

521022J: Teaching Tasks, 4 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Department of Computer Science and Engineering Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

520022J: Teaching Tasks, 4 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Department of Electrical Engineering Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

450022J: Teaching Tasks, 4 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Oulu School of Architecture Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

460022J: Teaching Tasks, 0 - 5 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Field of Mechanical Engineering Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.

722004J: Teaching Tasks, 0 - 4 op

Voimassaolo: 01.08.2012 -Opiskelumuoto: Post-graduate Studies Laji: Course Vastuuyksikkö: Oulu Business School Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvauksia.