Technology Oriented Primary Teacher Education

The main objective of teacher training in technology education is to give the students a teaching qualification which incorporates the capacity to use technological applications in education in general. Studies in both mathematical and natural sciences and technical skills development give the student the capacity to integrate technological teaching and develop new learning environments at a more advanced level than the usual subject and school level technology teaching which occurs in schools today.

Deviating from the usual primary education training programmes, the technology education programme also incorporates technology education studies in addition to education studies. Technology education is understood as educating for life in a technological world. More specifically, it is defined as field in which technological understanding is examined at an in-depth level, so that the learners can successfully solve problems and situations relating to technology and technological learning, apply relevant knowledge and skills, and acquaint themselves with forms of professional and scientific training that apply technology.

Technology Education provides a learning environment in which the opportunities arising from educational technology are applied in education and schooling and in which technology is examined in relation to various subjects.

The platform of this teacher training programme is that the general educational level of all citizens should include the technological skills and knowledge they need in order to survive in today's society - a society that is highly dependent on technology and technological advancement.

Main principles:

- new content areas and approaches in technological advancement
- the need to develop the links between maths and natural sciences and technology education
- the need to implement a new minor subject studies system in accordance with new regulations, which gives the teacher the opportunity to teach at a middle-school level in subjects taught at the University of Oulu
- the need for teacher training in environment and entrepreneurship education.
- The need to develop study and research in educational technology as proscribed by the Ministry of Education, among others.
- Developing inter-faculty cooperation by providing technology-related courses and curricula in the technical and natural sciences departments and faculties.
- Knowledge of recent international trends in teacher education and development of international cooperation.

The aim of the programme is to equip primary teachers with the necessary technological, social and education development skills, which qualify them to teach technology in basic education. The aim is not to school technocrats, but expert teachers with knowledge of technology-related areas. The programme follows the general objectives of primary school teacher training, and in addition:

- developing the teacher's capacity to take advantage of technological opportunities arising in education
- developing the teacher's capacity to teach learners to understand the technological world and its positive and negative aspects as well as technological advancement from the individual and broader societal levels.
- developing the teacher's capacity to make use knowledge and skills related to mathematical and natural sciences in developing technology education, and vice versa.

The technology education programme consists of a 180 ECT B(Ed) and a 120 ECT M(Ed) degree. The B(Ed) studies consist of the basic and intermediate studies in the major subject as well as language, communication and orientation studies, minor subject studies and other studies. The intermediate studies include a Bachelor's thesis. The M(Ed) degree consists of advanced studies, which include a Masters thesis in addition to language, communication and orientation studies and other studies.

The teacher's pedagogical studies of the programme are incorporated into both degrees.

**Tutkintorakenteisiin kuulumattomat opintokokonaisuudet ja -jaksot**

406031A-05: Accompaniment Instrument, 2 op
408022S: Application of Research Methods to Technology Education Research, 4 op
406034A-03: Applications of Electronics, 2 op
406034A-02: Applications of mechatronics, 2 op
406032A: Art, 7 op

*Compulsory*
- 406032A-01: Art, First year, 1 op
- 406032A-02: Art, Second year, 1 op
- 406032A-03: Ceramics, 1 op
- 406032A-04: Building, 1 op
407030A: Bachelor's Thesis, 9 op
410067P: Basic course in education, 4 op
406036A: Basics of Art and Practical Education, 2 op
408019S: Basics of educational administration, 2 op
406028A: Biology, 2 op
406034A: Crafts/Technical Work and Technology, 7 op
406033A: Crafts/Textile Work and Technology, 7 op
408015S: Curriculum and School Development, 5 op
406037A-02: Device control, 1 op
410068P: Didactics, 4 op
406021A: Drama Education, 2 op
408016S: Education and Teacher's Work in Change, 5 op
410071P: Educational philosophy, 4 op
410069P: Educational psychology, 4 op
406024A: Ethics, 2 op
405020Y: Foreign language and multiculturalism, 3 op
406029A: Geography, 2 op
407027A: Guidance of Learning, Planning and Evaluation of Teaching, 3 op
406030A: Health Education, 1 op
406022A: History, 3 op
407029A: Infant and Primary Education, 3 op
410014Y: Information and communication as a pedagogical tool, 3 op
405024Y: Introduction to Theoretical Foundations and Practices in Technology Education, 4 op
406020A-02: Language and Writing, 4 op
406031A-03: Listening Education, 1 op
406020A-01: Literature and Reading, 3 op
408013S: Master's Thesis, 35 - 40 op
406033A-01: Materials, Sewing and Clothing Technology, 3 op
406025A: Mathematics Education: Part I, 3 op
406026A: Mathematics Education: part II, 2 op
406020A: Mother Tongue and Literature, 7 op
A256402: Multidisciplinary Studies in the Subjects and Cross-Curricular Themes Taught in Basic Education, 65 op
410017Y: Multimedia as a learning project, 2 op
406031A: Music, 8 op
406031A-04: Music Theory in Practice, 1 op
408014S: Optional Course, 5 op
406037A: Optional Studies in Art and Practical Education, 2 - 6 op
408025S: Optional Studies: Basics of Educational Administration, 1 op
410075P: Orientation to Work at School, 2 op
405023Y: Orientation to studies, 1 op
406031A-01: Pedagogical Applications of Music Education, 3 op
410076P: Pedagogical Seminar in Technology Education I, 3 op
407034A: Pedagogical Seminar in Technology Education II, 3 op
408023S: Pedagogical Seminar in Technology Education III, 3 op
406033A-03: Pedagogical and Didactic Questions, 2 op
406035A: Physical Education, 7 op
406027A: Physics and Chemistry, 4 op
406023A: Religion, 2 op
411006A: Research course I, 10 op
413005S: Research course II, 10 op
407032A: School Experience II: Bachelor's Level, 6 op
408020S: School Work in the Master Phase, 11 op
407033A: Science Culture and Technology, 2 op
410016Y: Scientific communication I, 2 op
410019Y: Scientific communication II, 2 op
410070P: Sociology of education, 4 op
407026A: Special Education, 3 op
410016Y: Speech Communication, 2 op
407024A: Teacher as a Pedagogical Thinker and Agent, 3 op
408021S: Theme-based Practice, 6 op
406034A-01: Traditional Handicrafts in the Context of Technical Work, 3 op
406033A-02: User-Centred Design and Manufacture as an Approach to Crafts nad Technology Problems, 2 op
406031A-02: Voice and Singing, 1 op

Opintojaksojen kuvaukset

Tutkintorakenteisiin kuulumattomien opintokokonaisuuksien ja -jaksojen kuvaukset
406031A-05: Accompaniment Instrument, 2 op

Voimassaolo: 01.08.2005
Opiskelumuoto: Intermediate Studies
Laji: Partial credit
Vastuuysikkö: Faculty of Education
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

408022S: Application of Research Methods to Technology Education Research, 4 op

Voimassaolo: 01.08.2006
Opiskelumuoto: Advanced Studies
Laji: Course
Vastuuysikkö: Faculty of Education
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
Voidaan suorittaa useasti: Kyllä

ECTS Credits:
4 cr
Language of instruction:
Finnish
Timing:
Masters level
Learning outcomes:
Familiarize students on how to use educational research methods in the context of technology education.
Contents:
Optional course which can provide the content for the 408014S Optional section course. We look at different content-areas in technology education, which are then problematized for both quantitative and qualitative research methods.
Learning activities and teaching methods:
Lectures 12h, exercises 28h.
Recommended or required reading:
web-material and lectures, also
Metsämuuronen, J. (2003) Tutkimuksen tekemisen perusteet ihmistieteissä (soveltuvin osin). The availability of the literature can be checked from this link.

Assessment methods and criteria:
Participation in lectures and exercises, an essay on a research method in technology education.
Grading:
0-5
Person responsible:
Matti Lindh

406034A-03: Applications of Electronics, 2 op

Voimassaolo: 01.08.2005
Opiskelumuoto: Intermediate Studies
Laji: Partial credit
Vastuuysikkö: Faculty of Education
Arvostelu: 1 - 5, pass, fail
406034A-02: Applications of mechatronics, 2 op

Voimassaolo: 01.08.2005 -
Opiskelumuoto: Intermediate Studies
Laji: Partial credit
Vastuuyksikkö: Faculty of Education
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:
5 - 6 credits
Language of instruction:
English
Learning outcomes:
During this course, students' visual thinking will be enhanced using methods of visual expression, colour theory, composition and a range of techniques and materials, including drawing, painting, design and school graphics. The emphasis will be on experiences and emotions as well as on such skills relating to work, information retrieval, interpretation and evaluation as are part and parcel of visual arts. Course contents focus on examining and reflecting on didactic and pedagogical applications of visual art teaching and curriculum development.

Contents:
Visual Art Education
- Children's drawings and artistic development
- Visual arts in learning and teaching
- Core visual arts curriculum
- Thematic entities and assessment

Visual Cultures
- Knowledge of visual arts
- Artistic experiences and conceptions of art
- Artistic images and commercial images
- Cultural institutions and pedagogy

Media and Visual Communication
- Analysis and interpretation of images
- Advertising images, photographic images and film

Environment Education
- Perceptual and experiential environment
- Cultural and natural environment
- Architecture and design

Learning activities and teaching methods:
Lectures and work in small groups 84 h; independent work 78 h.

Recommended or required reading:
Perusopetuksen opetussuunnitelman perusteet; kuvataide 2004.

The availability of the literature can be checked in this link.

Assessment methods and criteria:
Exercises and portfolio
Grading:
Exercises and portfolio (0 – 5)
Person responsible:
Minna Myllykangas ja Tapio Tenhu

Compulsory

406032A-01: Art, First year, 1 op
Voimassaolo: 01.08.2005 -
Opiskelumuoto: Intermediate Studies
Laji: Partial credit
Vastuuysikkö: Faculty of Education
Arvostelu: 1 - 5, pass, fail
Opintokohteen kiele: Finnish
Voidaan suorittaa useasti: Kyllä

406032A-02: Art, Second year, 1 op
Voimassaolo: 01.08.2005 -
Opiskelumuoto: Intermediate Studies
Laji: Partial credit
Vastuuysikkö: Faculty of Education
Arvostelu: 1 - 5, pass, fail
Opintokohteen kiele: Finnish
Voidaan suorittaa useasti: Kyllä

406032A-03: Ceramics, 1 op
406032A-04: Building, 1 op

Voimassaolo: 01.08.2011 -
Opiskelumuoto: Intermediate Studies
Laji: Partial credit
Vastuuysikkö: Faculty of Education
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojakosokuvauksia.

407030A: Bachelor's Thesis, 9 op

Voimassaolo: 01.08.2005 - 31.07.2015
Opiskelumuoto: Intermediate Studies
Laji: Course
Vastuuysikkö: Faculty of Education
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Leikkaavuudet:

442164A Bachelor's thesis 10.0 op

ECTS Credits:
9 cr
Language of instruction:
Finnish
Timing:
2nd and 3rd year
Contents:
The course is divided into two parts
1) Proseminar 8 ECT, during which the student prepares a research paper on a topic in education, e.g. an issues in teaching, learning or the educational work. During the seminar work the students focus on aspects of scientific writing and argumentative discussion.
2) Bachelor's seminar (1 ECT), during which the student finalizes the proseminar research paper, presents it a seminar gathering and, finally, completes a maturity test in the area of research. More information available in the assessment section.

Learning activities and teaching methods:
The department has the following B(Ed)-groups:
Educational Sciences: Education studies Ari Kivela
Psychology of Education Studies Timo Latomaa

Primary education teacher training programme:
Learning and guidance
Group leaders: SK, HJ. Group description: This seminar group focuses on studying recent themes on learning and its guidance. These include learning as a personal and social phenomenon, developing learning environments and technological tools as enablers of the learning process. The aim is for the students to learn the basics of scientific writing and to be able to apply qualitative research methods in analysing small-scale research data.

Arts and crafts B(Ed) Group:
Group leader: HH. Group description: The group focuses on research which incorporates viewpoints in art education and arts subjects. Research topics examine the theoretical, philosophical and pedagogical foundations of arts and crafts education, as well as the teacher’s duties, pedagogical and practical experimental trials, curricula, etc. The theoretical basis of the research incorporates aspects of experiencing, learning and valuing art from the phenomenological, narrative and pragmatic viewpoints.

**Education, globalisation and ethical issues**
Group leaders: MLJ, KJ. Group description: [summary of topics already translated]

**Researching mathematics, natural sciences and technology in education**
Group leader: ML, VMS, TSK, KK: Objectives: The students learn to prepare an educational research paper with a theory-emphasis in a topic relating to Maths, natural sciences, technology or ICT.

**Growth, education and society:** Group leader: - Group description: This group looks at education and development as societal and cultural phenomena. Thesis topics may include, for example, the importance of locality as a growth environment, particularly in the cases of northern villages and small schools, teacherhood, identity and agency, power and exploitation, bullying, violence and non-violence in school, environmental issues, well-being, gendered practices and meanings in educational and growth, structural and other social factors in education, educational policy. There are various ongoing research projects in these topics, which offer students a range of opportunities for discussion, good supervision and expertise.

**Early childhood education:** Group leader: AP. Group description: Themes include multiculturalism, ICT-use and media education. The main target group consists of infant and primary education children, but the topics can also be examined from the perspective of other age groups.

**B(Ed) group:** Group leader: HK. Theme: Child learning in early childhood education


The student may also participate in research groups outside the faculty.

**Recommended or required reading:**
For TechEd students, course material is the same as for their Pedagogical Seminar I.

**Assessment methods and criteria:**
For those doing primary school teacher training programmes, coursework is implemented as follows: 2-4h joint lectures and 30 seminar sessions in the research groups.

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**410067P: Basic course in education, 4 op**

**Voimassaolo:** 01.08.2005 -

**Opiskelumuoto:** Basic Studies

**Laji:** Course

**Vastuuysikkö:** Faculty of Education

**Arvostelu:** 1 - 5, pass, fail

**Opintokohteen kielet:** Finnish

**Leikkaavuudet:**
ay410067P Basic course in education (OPEN UNI) 4.0 op

**ECTS Credits:**
4 ECTS

**Language of instruction:**
Finnish

**Timing:**
1st year

**Learning outcomes:**
After completion, the student
- understands the most important features of education as a science
- has a basic understanding of the history of education and its main areas of study.
- Grasps the basic concepts of education and pedagogy and associated issues
- Can relate the subareas of educational sciences with each other
- Can identify tasks in the practical and professional field and associated problem areas.

**Contents:**
Education...
- as a science, main areas and subareas
- basic concepts: development, civilisation, teaching, pedagogical activity
- history and development in Finland
In practice
- Basics of professional growth and development
- Orientation to educational tasks in practice, and examining professional identity in teaching or other educational tasks.

Learning activities and teaching methods:
Lectures and other contact teaching 18h, and independent studies.

Recommended or required reading:
Availability can be checked here.

Assessment methods and criteria:
Exam.

Grading:
pass/fail

Person responsible:
Eetu Pikkarainen

406036A: Basics of Art and Practical Education, 2 op

Voimassaolo: 01.08.2005 -
Opiskelumuoto: Intermediate Studies
Laji: Course
Vastuuyksikkö: Faculty of Education
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:
2 credits

Language of instruction:
English

Contents:
Students become acquainted with the basic philosophical and pedagogical principles and applications of art and practical education. This course combines practical skills with an art philosophical discussion, which takes the form of expert lectures organized in collaboration with the culture institution of oulu. Practical activities are conducted in workshops by integrating art and practical education with other subjects and courses in the basic educational curriculum. The magic lamp method, developed in film education, is used a tool of integration. Students also become familiar with basic animation techniques.

Learning activities and teaching methods:
Lectures 1pts and Small groups 1pts.

Recommended or required reading:
Literature (in English) introduced by the lecturers at the beginning of the course.

Grading:
pass/fail

Person responsible:
Art teachers

408019S: Basics of educational administration, 2 op

Voimassaolo: 01.08.2005 -
Opiskelumuoto: Advanced Studies
Laji: Course
Vastuuyksikkö: Faculty of Education
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Language of instruction:
Finnish

Timing:
4th or 5th year

**Learning outcomes:**
Upon completion of the study module, the students
- know the laws and statutes governing educational administration as well as their contents
- know how to apply educational administration legislation into practice at their own level of education
- know how to use the Finlex software.

**Contents:**
The course aims to give the students the necessary legal proficiency for work as a public servant or in school administration. In addition, the students will gain an understanding of their own rights and obligations and learn how to recognize situations when further information and/or help is necessary. During the course, the students will be introduced with the administration system and public services in terms of set duties and opportunities as defined in legal regulations and norms.

**Learning activities and teaching methods:**
Lectures 16 h, small-group work and an assignment 4 h.

**Grading:**
pass/fail

**Person responsible:**
N.N.

### 406028A: Biology, 2 op

**Voimassaolo:** 01.08.2005 -
**Opiskelumuoto:** Intermediate Studies

**Laji:** Course

**Vastuuysikkö:** Faculty of Education

**Arvostelu:** 1 - 5, pass, fail

**Opintokohteen kielet:** Finnish

**ECTS Credits:**
2 credits

**Language of instruction:**
English

**Timing:**
2nd academic year

**Learning outcomes:**
The goal of teaching, studying and learning of Biology is that the learners comprehend their responsibility of nature, constructed environments, themselves and other people. Students gather and construct information during the courses and develop skills for planning and implementing of teaching situations and environments so that the scientific thinking of a pupil and its development is possible from individual, interactive and collaborative perspectives. During the course of biology, students examine organic and inorganic nature, human beings as a part of nature, and study the relations between them.

**Contents:**
Content:

1. **Introduction**
   - Overview of the aims, contents and methods of completion of the course
   - The curriculum of biology

2. **Biological base of life**
   - Energy flow
   - Material cycle
   - Photo- and chemosynthesis

3. **Plant morphology and physiology**
   - Cells
   - Water and Nutrient Transport
   - Plant growth and reproduction
   - Structure of the body
   - Function and regulation of organs, systems and organ systems

4. **Genetics**

5. **Organisms and their environment**

6. **Biodiversity**
   - Biomes and ecosystems
   - Phenology
Learning activities and teaching methods:
Lectures and group work 16 h.

Recommended or required reading:
National core curriculum for Basic Education (Biology) http://www.oph.fi/english/page.asp?path=447, 27598,37840,72101,72106

AND


OR


The availability of the literature can be checked from this link.

Assessment methods and criteria:
Active participation in the contact teaching and a final exam. The exam can be replaced with some alternative method of completion agreed separately with the teacher responsible for the course.

Grading:
0-5

Person responsible:
Eila Jeronen

406034A: Crafts/Technical Work and Technology, 7 op

Voimassaolo: 01.08.2005 -
Opiskelumuoto: Intermediate Studies
Laji: Course
Vastuuysikkö: Faculty of Education
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
Voidaan suorittaa useasti: Kyllä

ECTS Credits:
5 - 6 credits

Language of instruction:
English

Learning outcomes:
Core curriculum in technical work encompasses knowledge and skills required to teach technical work in primary school.

These studies comprise three courses:
1. Traditional Handicraft in the Context of Technical Work (2 pts./ 1 cr.)
2. Mechatronic Applications 2 pts./ 1 cr.)
3. Electronics Applications (2 pts./ 1,5 cr.)

Emphasis on the first of these courses is on traditional handicraft. Through lectures and exercises, students familiarize themselves with common materials used in technical work and learn how to machine them. Work begins with individual design, written documentation is used during design and implementation, and products are directed toward application at the primary school level. The second course focuses on the application of basic mechatronic principles to technical work at the primary school level. Adopting a didactic approach, the course combines mechanical and electrical elements into technological constructs that can be brought under critical pedagogical scrutiny. The main goal of the third course is to lead students toward an understanding of the fundamental principles of electrical engineering and electronics through individual design, experimentation and construction. Students’ didactic competence is developed with the primary school pupil in mind.

Contents:

1. Traditional Handicraft in the Context of Technical Work (2 pts./ 1 cr.)
   - Students become familiar with common materials and their machine-tooling through lectures and exercises
1. Starting point for work is individual design
   Using writing as a tool, design and implementation of work is directed toward application to technical work in primary schools
   Course is offered in the autumn term of the first year

2. Mechatronic Applications (2 pts./1 cr.)
   - Students learn to apply basic mechatronic principles to primary level technical work
   - Didactic starting point
   - Mechanical and electronic elements are combined into technological constructs that are assessed and analyzed in written reports
   - Course is offered in the spring term of the first year

3. Electronics Applications (2 pts./1.5 cr.)
   - Students are guided toward an understanding of the fundamental principles of electrical engineering and electronics through individual design, experimentation and construction
   - Emphasis on developing didactic competence
   - Course is offered in the autumn term of the second year

Learning activities and teaching methods:
Working methods
- Traditional Handicraft in the Context of Technical Work: lectures 6 h, small groups 22 h,
- Mechatronic Applications: lectures 4 h, small groups 24 h
- Electronics Applications: lectures 8 h, small groups 20 h

Recommended or required reading:

The availability of the literature can be checked in this link.

Literature (in English): introduced by the lecturers at the beginning of the course.
Grading:
0-5
- Mainly numerical grades, sometimes pass/fail
- Written and/or web-based materials produced during the course will be assessed for content and didactic methodology
- Instead of producing such materials, these studies may be completed by examination based on lecture materials and course books
- Material objects produced by students during exercises will be graded numerically paying particular attention to their pedagogical value and functional and aesthetic aspects
- Ratio between assessment of material objects and written materials is 2:1

Person responsible:
Teuvo Pussila

406033A: Crafts/Textile Work and Technology, 7 op
Voimassaolo: 01.08.2005 -
Opiskelumuoto: Intermediate Studies
Laji: Course
Vastuuysikkö: Faculty of Education
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
Voidaan suorittaa useasti: Kyllä
ECTS Credits:
5 - 6 credits

Language of instruction:
English

Timing:
1 st year and 2 and year

Learning outcomes:
These studies aim at helping students to understand the role and responsibility of crafts as part of the educational mission of comprehensive school. Learning and teaching are approached from the traditions and current practices of crafts and textile work, with a focus on future challenges. Viewed both from an aesthetic and a technological perspective, textiles are seen as constituting the immediate environment of humans and as part of the constructed environment. Through a cooperative approach, students become acquainted with the contents of the subject area and technological problem solution. The scientific basis of textile work can be found in handicrafts science as well as crafts, art and technology education.

Contents:
Crafts/Textile Work and Technology studies comprise three courses:

1. User-centered design and production and problem solving in crafts and technology (2 pts/ 1 cr.)
   This course familiarizes students with user-centered design and problem solving in crafts and technology. They collaborate to design and manufacture a functional prototype that solves a particular problem. Theoretical contents and practical processes are documented and analyzed using the portfolio approach. The course also includes excursions.

2. Material, sewing and clothing technology (2 pts/ 1 cr.)
   In material technology, students consider textiles in terms of their fiber material and fabric structure and as products. Sewing and clothing technology is studied by making a garment from an elastic material and by lengthening the live span of another garment by repairing it. Students evaluate their own learning process both theoretically and practically using a portfolio.

3. Pedagogical and didactic considerations (2 pts/ 1.5 cr.)
   Product design, manufacture and evaluation processes are viewed within the framework of crafts, technology and art education. Teaching is problem-based and learning is assessed by means of portfolios.

Learning activities and teaching methods:
Working methods
- Studies include teaching in large and small groups, individual work and partially optional participation in workshops
- Completion requires active participation
- Both theoretical and practical studies are documented in a partially digital, partially 3-dimensional pedagogical portfolio
- Theoretical knowledge can also be tested through an examination
- Part of studies are common to all craft-oriented courses (textile work and technology)
- Material, sewing and clothing technology: lectures 10 h, small groups 18 h, independent work 26 h
- User-centered design and production and problem solving in crafts and technology: lectures 8 h, small groups 20 h, independent work 26 h
- Pedagogical and didactic considerations: lectures 10 h, small groups 18 h, independent work 26 h

Recommended or required reading:


Assessment methods and criteria:
Lectures 8 h, small groups 20 h and independent work 26 h.

Lectures 10 h, small groups 18 h and independent work 26 h.

Lectures 10 h, small groups 18 h and independent work 26 h.

Grading:

0-5
- Evaluation consists of cooperative evaluation, peer evaluation, self-evaluation and evaluation by teacher
- Exercises are graded pass or fail
- Final assignment and teaching portfolio will be evaluated on the basis of agreed criteria and graded 0–5

Person responsible:
Marjut Sarkkinen

408015S: Curriculum and School Development, 5 op

Voimassaolo: 01.08.2005 -
Opiskelumuoto: Advanced Studies
Laji: Course
Vastuuysikkö: Faculty of Education
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:
5 cr

Language of instruction: Finnish

Learning outcomes:
The course provides students with the necessary capacities for curricular design at the school and municipal levels, and training for curricular evaluation at the local, national and international levels. The course places particular emphasis on the significance of curriculum in school development and explores the connections between education policy, social politics and curriculum. We examine reform strategies and change multilaterally and critically, and study the relationships between teacher professionalism, curricular reforms and school development. In addition, school evaluation will be looked at in terms of both theory and practice at local, national and international levels. As a whole, the course gives student teachers the capacity to function as committed, critical and responsible actors in the areas of school development and curricular reform.

Skills objectives: the student is able to
- define the concept of curriculum
- identify and interpret the values and goals underlying curricula as well as their connections with society and education policy.
- Visualize the different levels of educational evaluation (local, national, international; theory and practice)
- Understands school development and curricular reform in terms of each other.
- Is able to design a curriculum and manage/develop its basis of evaluation

Contents:
- concept of curriculum
- different curricular theories and approaches
- theoretical and practical knowledge in school reform and development
- external and teacher-initiated reform
- teacher autonomy and expertise in transition, school development and evaluation
- foundations, levels and methods in evaluation
- evaluation and education policy

**Learning activities and teaching methods:**
- lectures 20h and small-group work 12h. A part of this is practical experience in which a curricular or evaluative project is designed, or the student describes and assesses an ongoing project in which s/he is participating. This task is integrated into the multi-disciplinary work practice course.

**Recommended or required reading:**

OR

The availability of the literature can be checked from [this link](#).

**Grading:**
0-5. Lecture and literature exam 0-5, development/evaluative task report 0-5.

**Person responsible:**
Leena Syrjälä

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**406037A-02: Device control, 1 op**

**Voimassaolo:** 01.08.2005 -
**Opiskelumuoto:** Intermediate Studies
**Laji:** Partial credit
**Vastuuysikkö:** Faculty of Education
**Arvostelu:** 1 - 5, pass, fail
**Opettajat:** Lindh, Matti Otto Oskari
**Opintokohteen kielet:** Finnish

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**410068P: Didactics, 4 op**

**Voimassaolo:** 01.08.2005 -
**Opiskelumuoto:** Basic Studies
**Laji:** Course
**Vastuuysikkö:** Faculty of Education
**Arvostelu:** 1 - 5, pass, fail
**Opintokohteen kielet:** Finnish
**Leikkaavuudet:**
ay410068P Didactics: (OPEN UNI) 4.0 op

**ECTS Credits:**
4 ECTS
**Language of instruction:** Finnish
**Timing:** 1. year

**Learning outcomes:**
After completion the students
- understand the basic concepts related to learning and teaching, their theoretical foundations and significance in practice
- understand the learning process and its cognitive, motivational and social features.
- Recognize the teacher’s role as a director/guider of learning and are familiar with new teaching models
- Are able to analyse the characteristics of a good learner in theory and in practice and are aware of how learning skills can be taught.

Contents:
- basic concepts related to learning and teaching, their theoretical foundations and significance in practice
- the learning process and its cognitive, motivational and social features.
- Theoretical foundations of guiding learning: the teacher's role as a director of learning and teaching models
- Principles of curricular design and lesson-planning
- the characteristics of a good learner in theory and in practice: how learning skills can be taught
- Basic models of ICT in teaching and learning

Learning activities and teaching methods:
Lectures and other contact teaching 18 h and independent studies.

Recommended or required reading:
Applicable parts:

Course material availability can be checked here.

Assessment methods and criteria:
Exam.
Grade:
pass/fail
Person responsible:
Sanna Järvelä

406021A: Drama Education, 2 op

Voimassaolo: 01.08.2005 -
Opiskelumuoto: Intermediate Studies
Laji: Course
Vastuuksikkö: Faculty of Education
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:
2 credits
Language of instruction:
English
Timing:
2nd study year
Learning outcomes:
This course focuses on the foundations of expressive education and drama pedagogy as well as on the development of interaction skills.

Contents:
Content:
- drama as a method to learn
- drama pedagogy
- problems relating to the development of interaction skills

Learning activities and teaching methods:
Small groups 24 h and independent work.

Recommended or required reading:
Introduced by the lecturer of the course at the beginning of the course.
Grading:
### 408016S: Education and Teacher's Work in Change, 5 op

**Voimassaolo:** 01.08.2005 -  
**Opiskelumuoto:** Advanced Studies  
**Laji:** Course  
**Vastuuysikkö:** Faculty of Education  
**Arvostelu:** 1 - 5, pass, fail  
**Opintokohteen kielet:** Finnish

**ECTS Credits:**  
5 cr  
**Language of instruction:** Finnish  
**Timing:**  
4th year  
**Learning outcomes:**  
The student  
- is able to analyse and interpret the challenges of change in teaching work and the educational environment within the societal context.  
- is able to develop working manners that are based on multi-sectoral collaboration with which these challenges can be met  
- is aware of the working challenges of a young teacher and how to cope in such a position  
- is aware of the human-relations aspect in teaching work and is able to act tactfully in maintaining them.

**Contents:**  
the following topics will be covered  
- teacherhood in transition  
- ethics of responsibility and care in teaching work  
- growing as a person and teacher's identity building  
- the school as a community  
- human relations and interaction skills  
- group phenomena in schools  
- safety and security at schools  
- cooperation between the school and the home  
- learning on the job: coping in the teaching profession

**Learning activities and teaching methods:**  
Lectures and expert visits 22h and small-group work 12h.

**Recommended or required reading:**  
The reading group is divided so that everybody focuses on two books from the set list of literature.

**Assessment methods and criteria:**  
participation in lectures and small-group sessions and completion of set exercises; familiarisation with literature either through participation in a reading group or essay writing.

**Grading:**  
0-5  
**Person responsible:**  
Minna Ultto and Eila Estola

### 410071P: Educational philosophy, 4 op

**Voimassaolo:** 01.08.2005 -  
**Opiskelumuoto:** Basic Studies  
**Laji:** Course  
**Vastuuysikkö:** Faculty of Education  
**Arvostelu:** 1 - 5, pass, fail  
**Opintokohteen kielet:** Finnish
Learning outcomes:
The students are familiar with the main areas of educational philosophy and how they give rise to educational problematicisation and question formulation as well as research and results. The students are able to identify, analyse and solve ethical and philosophical problems in education and teaching work and are able to critically assess previously suggested solutions.

Contents:
- educational philosophy as an area of educational sciences
- the nature of philosophy as a science, philosophical questions and the most important sub-areas.
- Objectives in education
- Historically important trends in academic study of educational philosophy
- The ethical disposition of educational, schooling and teaching, and question formulation in pedagogical activity
- Educational philosophy and ethical perspectives as a platform for professional ethics in pedagogical activity.

Learning activities and teaching methods:
Lectures and other teaching 18 h, independent studies.

Recommended or required reading:
Applicable parts:


Etikka koulun arjessa. (2002)


Course material availability can be checked here.

Assessment methods and criteria:
Participation in lectures. Exam.

Grading:
pass/fail

Person responsible:
Jouni Peltonen

Other information:
For Early childhood education students this course is 3 ECTS; in addition to lectures they will complete 2 ECTS worth of exercises.
ECTS Credits: 4 credits
Language of instruction: Finnish
Timing: 1st year
Learning outcomes:
- the student knows the central concepts and research areas and topics in educational psychology
- the student understands the special nature of educational psychology and can estimate the opportunities and limitations in applying it in educational work

Contents:
- the relationship between educational psychology and psychology, educational research and civilisation studies as well as other subareas of education
- object of research and basic concepts: growth, education, development and developmental processes, and psychological adulthood as a form of personal sophistication
- psychological theory of growth and development
- professional practice in educational psychology and its application in issues relating to growth and development

Learning activities and teaching methods:
Lectures and other teaching 18 h, independent studies

Recommended or required reading:
Applicable parts:

Early Childhood Education students study one of the Lehtinen, E. books.
Course material availability can be checked here.

Assessment methods and criteria:
Exam.
Grading: pass/fail
Person responsible: Hannu Soini

Other information:
In early childhood education, this course is 2 cr in scope (lectures only)

406024A: Ethics, 2 op

Voimassaolo: 01.08.2005 -
Opiskelumuoto: Intermediate Studies
Laji: Course
Vastuuysikkö: Faculty of Education
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits: 2 credits
Language of instruction: English
Learning outcomes:
Students gain a holistic view of philosophy/ethics as a subject taught in comprehensive and upper secondary school. They also acquire basic knowledge and skills for teaching ethics and philosophy in primary school.

Objectives of learning:
- Gaining a holistic view of philosophy/ethics as a subject taught in comprehensive and upper secondary school
- Acquiring basic knowledge and skills for teaching ethics and philosophy in primary school.

Contents:
Contents
Learning activities and teaching methods:

- All students familiarize themselves with the literature introduced by the lecturers.
- Alternative modes of working include small groups (including planning of teaching, familiarization with and presentation of methods applicable to teaching ethics and philosophy, etc., at students’ discretion).

Recommended or required reading:

The availability of the literature can be checked in this link.

Agreed separately with the teacher responsible for the course.


Upper secondary school textbooks
Nykyyihmiset etiikka ja moraali.

Literature (in English): Introduced by the lecturers at the beginning of the course.

Grading:
0-5

Person responsible:
Markku Salakka

405020Y: Foreign language and multiculturalism, 3 op

Opiskelumuoto: Language and Communication Studies
Laji: Course
Arvostelu: 1 - 5, pass, fail
Opettajat: Roberts Gordon
Opintokohteen kielet: English

ECTS Credits:
3 cr

Language of instruction:
English

Timing:
1st year

Learning outcomes:
- Ability to communicate in different topics relating to teaching and educational research in a foreign language.
- Practice in producing and comprehending teaching and scientific presentation in a different language (written and spoken)
- Gather information on a selected topic and give presentations on the chosen topic area.
- Familiarisation with different forms of media as channels of interaction.
- Gain insight on how multicultural environments affect teaching.

Contents:
The course builds student capacities in communicating. Student practice providing teaching and the presenting scientific material and their general understanding in a different language.

Learning activities and teaching methods:
Small-group work 40 h.

Recommended or required reading:
TBC.

Grading:
pass/fail

Person responsible:
Gordon Roberts

406029A: Geography, 2 op

Voimassaolo: 01.08.2005 -
Opiskelumuoto: Intermediate Studies
Laji: Course
Vastuuysikkö: Faculty of Education
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:
2 credits

Language of instruction:
English

Timing:
1st academic year

Learning outcomes:
The goal of teaching, studying and learning of Geography is that the learners comprehend their responsibility of the nature, constructed environments, themselves and other people. Students gather and construct information during the courses and develop skills for planning and implementing of teaching situations and environments so that the scientific thinking of a pupil and its development is possible from individual, interactive, and collaborative perspectives. During the course in Geography, students get acquainted with integral issues and phenomenon relating to natural and cultural Geography.

Contents:
1. Introduction
   • Overview of the aims, contents and methods of completion of the course
   • The curriculum of geography
2. Maps and teaching of maps
   • Different maps
   • Different approaches to teaching of maps
3. Space, climate and weather
   • Earth in the universe and solar system
   • Climatic zones
   • Weather and observing of it
4. Natural resources and livelihoods
   • Organic and inorganic material
   • Soil types, rocks, minerals and ores
   • Structure of livelihoods
5. Landscapes and use of land
   • Topography
   • Types of landscapes
   • Built environment
6. Interaction between human beings and the environment
   • Environmental relation
   • Sustainable development
7. Multiculturalism as a thematic entity

Learning activities and teaching methods:
Lectures and group work 16 h.

Recommended or required reading:
Assessment methods and criteria:
Active participation in the contact teaching and a final exam. The exam can be replaced with some alternative method of completion agreed separately with the teacher responsible for the course.
Grading:
0-5
Person responsible:
Eila Jeronen

407027A: Guidance of Learning, Planning and Evaluation of Teaching, 3 op

Voimassaalo: 01.08.2005 -
Opiskelumuoto: Intermediate Studies
Laji: Course
Vastuuysikkö: Faculty of Education
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:
3 cr
Language of instruction:
Finnish
Timing:
2nd year
Learning outcomes:
After completion the student will be familiar with current theoretical discussion on teaching and learning, and will understand different learning and teaching models and their respective research results. The students will understand the principles required in curricular design, planning teaching, assessment and teacher collaboration in developing learning in school. The students will be able to substantiate the use of Different learning environments, ICT-applications and their theoretical learning foundations in different kinds of subjects and school development.

Contents:
- familiarisation with current discussion on learning and teaching, their models and research results.
- Clarification of the principles of curricular design, teaching planning, assessment and teacher collaboration in developing learning in school.
- Different learning environments, ICT-applications and their theoretical learning foundations in different kinds of subjects and school development.

Learning activities and teaching methods:
Lectures 12h, small-group sessions are integrated into the pedagogical seminar 16h, independent study.

Recommended or required reading:


The availability of the literature can be checked from this link.

Grading:
pass/fail
Person responsible:
406030A: Health Education, 1 op

Voimassaolo: 01.08.2005-
Opiskelumuoto: Intermediate Studies
Laji: Course
Vastuuysikkö: Faculty of Education
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:
1 credits

Language of instruction:
English

Timing:
3rd academic year

Learning outcomes:
Health education is a part of natural science subjects. The goal of teaching and learning of the subjects is that the learners comprehend their responsibility of the nature, constructed environments, themselves and other people. Students gather and construct information during the courses and develop skills for planning and implementing of teaching situations and environments so that the scientific thinking of a pupil and its development is possible from individual, interactive, and collaborative perspectives. During the course in health education, students familiarize themselves with, through operational methods, how pupils are supported in adapting a healthy lifestyle.

Contents:
Content
1. Introduction
   • Overview of the aims, contents and methods of completion of the course
   • The curriculum of health education
2. Basics of health education
   • Health and sickness as a concept
   • Goals of health education
   • Objectives and methods in health education
   • Evaluation of health skills
3. Ways of life
   • Physical, psychic and social health
   • Determinants for health
4. Structure and function of the body
   • Physical health
   • Nutrition
   • Exercise
   • Rest and sleep
   • Sexuality
   • Alcohol and drugs
5. Mental development function and challenges of children and adolescents
6. Models of behaviour change

Learning activities and teaching methods:
Lectures and group work 10 h.

Recommended or required reading:

AND


OR

Other books agreed separately with the teacher responsible for the course.

The availability of the literature can be checked in this link.

**Assessment methods and criteria:**
Active participation in the contact teaching and a final exam. The exam can be replaced with some alternative method of completion agreed separately with the teacher responsible for the course.

**Grading:**
0-5

**Person responsible:**
Eila Jeronen

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**406022A: History, 3 op**

- **Voimassaolo:** 01.08.2005 -
- **Opiskelumuoto:** Intermediate Studies
- **Laji:** Course
- **Vastuuysikkö:** Faculty of Education
- **Arvostelu:** 1 - 5, pass, fail
- **Opintokohteen kielet:** Finnish

**ECTS Credits:**
3 credits

**Language of instruction:**
English

**Learning outcomes:**
Contents:
- Why teach history?
- Whose history do we teach?
- Approaches to history teaching?

**Recommended or required reading:**


**Grading:**
0-5

**Person responsible:**
Gordon Roberts

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**407029A: Infant and Primary Education, 3 op**

- **Voimassaolo:** 01.08.2005 -
- **Opiskelumuoto:** Intermediate Studies
- **Laji:** Course
- **Vastuuysikkö:** Faculty of Education
- **Arvostelu:** 1 - 5, pass, fail
- **Opintokohteen kielet:** Finnish

**ECTS Credits:**
3 cr

**Language of instruction:**
Finnish

**Timing:**
2nd year

**Learning outcomes:**
The student
- is familiar with the theoretical foundations of infant and primary education
- is able to identify and adopt teaching principles and methods suitable for the targeted age-group
- is familiar with different methods in teaching reading and writing skills
- knows principles and practices in cooperation between the school and the home.

**Learning activities and teaching methods:**
Lectures 20h, small group sessions 12h and independent study.

**Recommended or required reading:**
Esiopetuksen opetussuunnitelman perusteet. (2000)

The availability of the literature can be checked from [this link](#).

**Grading:**
0 - 5

**Person responsible:**
Riitta-Liisa Korkeamäki and Hannele Karikoski

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**410014Y: Information and communication as a pedagogical tool, 3 op**

**Voimassaolo:** 01.08.2005 -
**Opiskelumuoto:** General Studies
**Laji:** Course
**Vastuuysikkö:** Faculty of Education
**Arvostelu:** 1 - 5, pass, fail
**Opintokohteen kielet:** Finnish

**Leikkaavuudet:**
ay410014Y Information and communication as a pedagogical tool (OPEN UNI) 3.0 op

**ECTS Credits:**
3 cr

**Language of instruction:**
Finnish

**Timing:**
1st year

**Learning outcomes:**
The students
- familiarize themselves with the technical infrastructure of the university
- gain the abilities to use ICT as a tool in teaching and learning
- learn about how to use core programmes and their pedagogical applicability.
- Learn about the opportunities and limitations of new technologies in teaching and learning
- Learn to react critically to existing services and to assess them in terms of one's own work.

**Contents:**
The following topics are covered:
- general development of ICT
- the computer as a technical structure
- ICT-use in teaching, pedagogical applications
- Didactic/educational viewpoints
- Network-based learning environments
- Word-processing, digital image processing and web-content
- Basics of presentation graphics
- Basics of IP-based video-conferencing

**Learning activities and teaching methods:**
Lectures 10h, small-group sessions 20h, online work 10h, independent work.

**Recommended or required reading:**
Lectures, exercises and the students' own work (as applicable; published in the online learning environment). Other literature specified in the beginning of the course.

**Assessment methods and criteria:**
Active participation, independent exercises (online study journal), pair assignments (planning and realizing a teaching situation using video-conferencing), and a group assignment (presentation based on literature).

**Grading:**
pass/fail

**Person responsible:**
Kari Kumpulainen ja Asko Pekkarinen

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405024Y: Introduction to Theoretical Foundations and Practices in Technology Education, 4 op

**Voimassaolo:** 01.08.2006 -

**Opiskelumuoto:** General Studies

**Laji:** Course

**Vastuuysikkö:** Faculty of Education

**Arvostelu:** 1 - 5, pass, fail

**Opintokohteen kielet:** Finnish

**ECTS Credits:**
4 cr

**Language of instruction:**
Finnish

**Learning outcomes:**
The course aims to direct students in gaining an understanding on what technology education is all about. We review philosophical perspectives on technology, examining theme from the standpoint of general scientific philosophy, emphasizing their practical connection with ethics. Pedagogical work is linked to practice in exercises in which theory is concretized at object level.

**Learning activities and teaching methods:**
The course consists of two parts
1. Theory 1 ECT 26h (lectures on technology education and related subareas
2. Practice 3 ECT 54h (concretising TE theory by producing technical equipment for learning and teaching, which are tested in conjunction with TE Pedagogical seminar I and teaching practice.

**Recommended or required reading:**
tbc.

**Grading:**
active participation in all lectures and working sessions, producing concrete material/tools (pass/fail)

**Person responsible:**
Matti Lindh

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406020A-02: Language and Writing, 4 op

**Voimassaolo:** 01.08.2005 -

**Opiskelumuoto:** Intermediate Studies

**Laji:** Partial credit

**Vastuuysikkö:** Faculty of Education

**Arvostelu:** 1 - 5, pass, fail

**Opintokohteen kielet:** Finnish

**ECTS Credits:**
4 credits

**Language of instruction:**
Finnish
Timing:
2nd study year

Learning outcomes:
Students familiarize themselves with the linguistic knowledge and background theories required in the description and teaching of Finnish. They also learn skills relating to child instruction, language observation and study of language structures. Also strengthened is their ability to enhance pupils’ textual skills.

Contents:
Content:
- grammar of Finnish language
- variation of language
- development of children’s reading skills
- theories of writing: fictive writing, process writing and genre writing
- evaluation of writing

Learning activities and teaching methods:
Lectures 12 h, small groups 26 h and independent work 70 h.

Recommended or required reading:
Introduced by the lecturer of the course at the beginning of the course.

Assessment methods and criteria:
Participation in lectures and small groups and essay.

Grading:
0 - 5

Person responsible:
Lecturer of Finnish language

406031A-03: Listening Education, 1 op

Voimassaolo: 01.08.2005 -
Opiskelumuoto: Intermediate Studies
Laji: Partial credit
Vastuuysikkö: Faculty of Education
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

406020A-01: Literature and Reading, 3 op

Voimassaolo: 01.08.2005 -
Opiskelumuoto: Intermediate Studies
Laji: Partial credit
Vastuuysikkö: Faculty of Education
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:
3 credits

Language of instruction:
Finnish

Timing:
1st study year

Learning outcomes:
This course focuses on the primary level curriculum and helps students gain an understanding of the role of literature in childhood development and education. Using literary and interpretation pedagogy, a variety of texts are used to develop extensive and manysided reading, literacy and interaction skills.

Contents:
Content:
- genres of children’s literature
- didactics of literature
- folklore
• process reading and strategies of reading
• critical reading

**Learning activities and teaching methods:**
Lectures 10 h, small groups 26 h and independent work 45 h.

**Recommended or required reading:**
Introduced by the lecturer of the course at the beginning of the course.

**Assessment methods and criteria:**
Participation in lectures and small groups and essay.

**Grading:**
o - 5

**Person responsible:**
Lecturer of Finnish language

### 408013S: Master's Thesis, 35 - 40 op

**Voimassaolo:** 01.08.2005 - 31.07.2016
**Opiskelumuoto:** Advanced Studies
**Laji:** Course
**Vastuuysikkö:** Faculty of Education
**Arvostelu:** A,B,N,C,M,EX,L
**Opintokohteen kielet:** Finnish

**Language of instruction:**
Finnish

**Learning outcomes:**
The student can prepare, independently or in pairs, a piece of educational research, which shows that the student(s) is knowledgeable of the research area, has the capacity for academic thought, and has the necessary skills in research methodology and scientific and academic forms of communication. The student can evaluate the work of other researchers and take part in academic discussion.

**Contents:**
As a part of the advanced level studies of the major subject, the students prepare, independently or in pairs, a masters thesis, which shows that the student(s) is knowledgeable of the research area, has the capacity for academic thought, and has the necessary skills in research methodology and scientific and academic forms of communication.

**Learning activities and teaching methods:**
seminar work 40h, thesis, maturity test.

**Recommended or required reading:**
as applicable

**Grading:**
approbatur - laudatur

**Person responsible:**
Finnish professors (in selected major)

### 406033A-01: Materials, Sewing and Clothing Technology, 3 op

**Voimassaolo:** 01.08.2011 -
**Opiskelumuoto:** Intermediate Studies
**Laji:** Partial credit
**Vastuuysikkö:** Faculty of Education
**Arvostelu:** 1 - 5, pass, fail
**Opintokohteen kielet:** Finnish

### 406025A: Mathematics Education: Part I, 3 op

**Voimassaolo:** 01.08.2005 -
Opiskelumuoto: Intermediate Studies
Laji: Course
Vastuuysikkö: Faculty of Education
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:
3 credits

Language of instruction:
English

Timing:
1 st year

Learning outcomes:
Main aim is to give an overview of the objectives, contents, teaching methods, and assessment of mathematics in the elementary level. The course aims to strengthen the knowledge and skills needed in mathematics teaching. One aim is also to increase the learning psychological knowledge of mathematics education and the use of that information in teaching practice. Widening and strengthening the image of mathematics is also one goal. Important aim is also the promotion of the positive attitudes, appreciations, and self confidence in mathematics.

Contents:
- perspectives and approaches in mathematics teaching, national core curriculum
- problem solving, modeling, and applications
- problem based teaching
- concept of number, integer operations
- geometry and spatial thinking
- rational numbers

Learning activities and teaching methods:
32 h lecturelike introductions and problem based discussions, 48 h individual work.

Recommended or required reading:
To be told in the beginning of the course.

Assessment methods and criteria:
portfolio and voluntary exam

Grading:
0 - 5

Person responsible:
Vesa-Matti Sarenius

406026A: Mathematics Education: part II, 2 op

Voimassaolo: 01.08.2005 -
Opiskelumuoto: Intermediate Studies
Laji: Course
Vastuuysikkö: Faculty of Education
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:
2 credits

Language of instruction:
English

Timing:
2 nd year

Learning outcomes:
Course aims to strengthening and deepening the goals set in Mathematics Education, part I.

Contents:
- proportional thinking and developing it by teaching
- percentage
- measurement and calculation with units
Learning activities and teaching methods:
16 h lecturelike introductions and problem based discussions, 38 h individual work.

Recommended optional programme components:
Mathematics Education, part I is needed for part II.

Recommended or required reading:
To be told in the beginning of the course.

Assessment methods and criteria:
portfolio and voluntary exam

Grading:
0 - 5

Person responsible:
Vesa-Matti Sarenius

406020A: Mother Tongue and Literature, 7 op

Voimassaolo: 01.08.2005 -
Opiskelumuoto: Intermediate Studies
Laji: Course
Vastuuysikkö: Faculty of Education
Arvostelu: 1 - 5, pass, fail
Opettajat: Sääskilahti, Minna Susanna
Opintokohteen kielet: Finnish

ECTS Credits:
7 credits

Language of instruction:
English

Learning outcomes:
Students whose language of instruction has not been Finnish and whose Finnish language skills are not sufficiently good, are exempted from Finnish studies. Instead, they study the same amount of English and didactics of English language teaching. The aim of studies is to arouse students’ interest in language and to make them multiskilled intermediaries of linguistic culture, who possess the competence to develop the linguistic abilities of children. To this end, students familiarize themselves with Finnish and literature as school subjects, together with the contents, methods and background theories of communication teaching, primary level reading and literature.

Contents:
Finnish Language and Literature comprises two parts:
- Literature and Reading
- Language and Writing

Person responsible:
Lecturer of Finnish language

A256402: Multidisciplinary Studies in the Subjects and Cross-Curricular Themes Taught in Basic Education, 65 op

Opiskelumuoto: Intermediate Studies
Laji: Study module
Vastuuysikkö: Faculty of Education
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:
65 credits

Language of instruction:
English
Contents:

Humanities module

ECTS: 15 pts.
assessment: 0-5

This module crystallizes the three central perspectives in class-teacher education: values, social awareness and communication. Students familiarize themselves with the contents and pedagogy of the different subjects to gain the competence needed to enhance pupils’ language-based learning and interaction skills. Further, students acquire a knowledge base and assessment skills that support their ethical development, empower them to become active participants in democratic society and promote human rights. Courses:

- 406020 A Finnish Language and Literature (7 pts.)
- 406021A Drama Pedagogy (2 pts.)
- 406022A History (3 pts.)
- 406023A Religion OR
- 406024A Philosophy/Ethics (2 pts.)
- 407517A Thematic Practice (1 pts.)

Course convener: Leena Räisänen

Science module

ECTS: 15 pts.
assessment: 0-5

Studies in the Science Module aim at familiarizing students with science and mathematics teaching as well as applying and developing methods of teaching. Students will learn to perceive, study, model and explain scientific phenomena and events. In addition, they will understand the significance of mathematics and natural sciences in the context of pupil development and education. Teaching within the module focuses on key issues that enhance student abilities and curriculum development, didactics of the various subjects and implications of didactic research for teaching. Teaching may also involve integration of shared projects involving a number of different courses. Results and experiences of these projects can then be utilized in teaching practice. Courses:

- 406025A Mathematic Education: Part I (3 pts.)
- 406026A Mathematic Education: Part II (2 pts.)
- 406027A Physics and chemistry (4 pts.)
- 406028A Biology (2 pts.)
- 406029A Geography (2 pts.)
- 406030A Health Education (1 pts.)
- 407517A Thematic Practice (1 pts.)

Course convener: Tapio Keranto, Lasse Jalonen and Eila Jeronen

Arts module

ECTS: 30 pts.
assessment: 0-5

Studies in the Arts Module provide students with such fundamental knowledge and skills in arts and crafts as will allow them to carry out and develop the basic educational curriculum in line with pupil achievement. Another goal is to foster an understanding for the educational significance of the different arts and the skill building process from the perspective of child development. Courses:

- 406031A Music (8 pts.)
- 406032A Art (6 pts.)
- 406033A Crafts/Textile Work/Technology (6 pts.) OR
- 406034A Crafts/Technical Work and Technology (6 pts.)
- 406035A Physical Education (6 pts.)
- 406036A Basics of Art and Practical Education (1 pts.)
- 406037A Optional Studies in Art and Practical Education (2 – 6 pts.)
- 407517A Thematic Practice (1 pts.)

Students may take one arts and crafts course as a reduced 4 credit study unit. Course convener: Teachers in the Arts Module

Learning activities and teaching methods:

Target group:

Recommended optional programme components:
Recommended or required reading:

Assessment methods and criteria:

Grading:
0-5

Person responsible:
Matti Lindh

410017Y: Multimedia as a learning project, 2 op

Voimassaolo: 01.08.2005 -
Opiskelumuoto: General Studies
Laaj: Course
Vastuuysikkö: Faculty of Education
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
Leikkaavuudet:
ay410017Y  Digital Media in Teaching and Learning (OPEN UNI)  2.0 op

ECTS Credits:
3 cr
Language of instruction:
Finnish
Timing:
1st year
Learning outcomes:
In this course, the students
- learn about the opportunities of ICT in enhancing social learning in teaching
- study how to generate multimedia applicable for use in teaching and education.
- Gain the capacity to act as a pedagogical expert in a multimedia project
- Learn to use general programmes for creating multimedia content
- Understand the opportunities and restrictions of multimedia in teaching and education
- Study the sub-factors of multimedia (text, image, sound, animation, video) and relevant programmes
- Learn to publish multimedia products (CD/DVD/Internet/LAN)

Contents:
- basic concepts in multimedia
- Digital Storytelling as an agent in social learning and as a form of art
- Digital sound processing
- Digital image processing
- Programmes suitable for school and educational use
- Web-based animation
- Working in a web-based learning environment
- Closing seminar

Learning activities and teaching methods:
Lectures 10h, small-group sessions 20h, web-based work 10h, independent study.

Assessment methods and criteria:
Active participation, group assignment (digital story-telling or other team-based pedagogical multimedia project).

Grading:
pass/fail

Person responsible:
Kari Kumpulainen ja Asko Pekkarinen (Vaka)

406031A: Music, 8 op

Voimassaolo: 01.08.2005 -
Opiskelumuoto: Intermediate Studies
Learning outcomes:
In Music Studies, music education is viewed in the larger framework of cultural and art education. Students make music in groups and acquire the subject knowledge and pedagogical skills necessary for music education in school.

Music education comprises the following courses:

1. Pedagogical Applications of Music Education (3 cr.) Students acquaint themselves with such pedagogical applications of music education as working with a large musical group and paying attention to different level students. They are also introduced to the contents and methods of the subject through a wide range of activities.

2. Voice and Singing (1 cr.) Students learn effective use of voice together with various ways of teaching vocal expression and singing. They are also encouraged to use their voice for creative personal expression.

3. Listening Education (1 cr.) Students will be introduced to listening education as a natural ingredient of different ways of working with music. They also familiarize themselves with a range of music cultures, styles and stylistic periods and learn to adopt diverse approaches to music.

4. Music Theory in Practice (1 cr.) Students learn to play accompaniment in diverse musical settings. Focusing mainly on free accompaniment, the course helps to advance creative self-expression and the ability to follow music by ear.

5. Accompaniment Instrument / Piano or Guitar (2 cr.) To familiarize students with different musical notation systems, real chord symbols, different styles of music and accompaniment as well as playing techniques. Group lessons involve directing and accompanying communal singing and music playing.

Contents:
1. Pedagogical Applications of Music Education, 3 pts. (2 cr.)
   - Familiarize students with the pedagogical contents and uses of music in primary school through extensive music-making (singing, playing, music and rhythmic exercises as well as musical innovation)
   - Present basic techniques and pedagogical uses of school instruments (percussive instruments, percussion instruments, band instruments, self-made instruments, recorders and kantele (traditional Finnish harp))
   - Music education is a holistic arts and culture-based education which incorporates physical activities, drama, other arts and skills as well as extramusical themes.

2. Voice and Singing, 1 pts. (0,5 cr.) Provide practice in the proper use and maintenance of voice, vocal expression and their pedagogical application through singing, speech and play-like exercises.

3. Listening Education, 1 pts. (0,5 cr.)
   - consists of different music styles and genres
   - Listening education is an integral part of all musical activities and helps to put music in a time and place and to gain an appreciation for culturally different types of music
   - Music is approached by adding such elements to listening as enhance focusing on it (physical, verbal, visual or musical stimuli)
   - Music listening proceeds from experiences and emotions to concepts

4. Music Theory in Practice, 1 pts. (0,5 cr.)
   - To offer an introduction to musical notation, chord markings, keys and intervals
   - Practical competence is acquired through instrument playing (piano/guitar)

5. Accompaniment Instrument/Piano or Guitar, 2 pts. (1 cr.)
   - To familiarize students with different musical notation systems, real chord symbols, different styles of music and accompaniment as well as playing techniques
   - Group lessons involve directing and accompanying communal singing and music playing

Learning activities and teaching methods:
Working methods
1. Small groups 40 h
2. Small groups 14 h and independent work 13 h
3. Small groups 14 h and independent work 13 h
4. teaching takes place in one term and includes 14 h of contact teaching and 13 h of independent work
5. teaching 20 h and independent work 33 h

**Recommended or required reading:**
Ensimmäiset kouluvuodet. Perusopetuksen vuosiluokkien 1-2 opetus.


Musiikkikasvatuksen tutkimus. Jyväskylän yliopiston musiikkitieteiden laitoksen julkaisusarja A: tutkielmia ja
raportteja 15. 85-95.


keksintä osana sovellettua orff-pedagogiikkaa. Lisensiaatintutkimus. Kasvatustieteiden tiedekunta. Oulun
yliopisto.


Ajankohtaiset musiikkikasvatuksen artikkelit ja www-materiaali (esim. MOVE, Normaalkoulun ops, OPH:n
opetussuunnitelmien perusteet).

Eri kustantajien (mm. WSOY, Otava, Warner- Chappell) perusopetuksen musiikin oppikirjat ja niiden
oheismateriaali.

Eri musiikkityylien ja -lajien soittomateriaalia, kuten oppi- ja nuottikirjoja sekä soittooppaita eri kustantajilta.

The availability of the literature can be checked from [this link](#).

**Grading:**
1. Pass/fail
2. Pass/fail
3. Pass/fail
4. 0-5
5. 0-5

**Person responsible:**
Module convener: Teachers in the Arts Module.
Course convener:
1. Maria Mustonen ja Anu Kemppainen
2. Maria Mustonen
3. Marja Ervasti
4. Markku Pehkonen ja Anu Kemppainen
5. Markku Pehkonen ja Anu Kemppainen

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**406031A-04: Music Theory in Practice, 1 op**

**Voimassaolo:** 01.08.2005 -

**Opiskelumuoto:** Intermediate Studies

**Laji:** Partial credit

**Vastuuysikkö:** Faculty of Education

**Arvostelu:** 1 - 5, pass, fail

**Opintokohteen kielet:** Finnish
408014S: Optional Course, 5 op

Voimassaolo: 01.08.2005 -
Opiskelumuoto: Advanced Studies
Laji: Course
Vastuuyksikkö: Faculty of Education
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Learning outcomes:
After completing their selected optional advanced level studies courses, students are able to justify their educational viewpoints with recent and diverse scientific knowledge.

Contents:
The student can select advanced level courses from the faculty's yearly offered courses. The selection of courses is updated yearly and can be found on the department's internet pages as well as the notice-board.

Other information:
TAIKA, see course 408026S.

406037A: Optional Studies in Art and Practical Education, 2 - 6 op

Voimassaolo: 01.08.2005 -
Opiskelumuoto: Intermediate Studies
Laji: Course
Vastuuyksikkö: Faculty of Education
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
Voidaan suorittaa useasti: Kyllä

ECTS Credits:
1 - 6 credits

Language of instruction:
English

Contents:
Optional studies consist of art and practical studies or integrating thematic units. Optional studies and their completion are announced separately at the beginning of each term. The extent of optional studies is 2.0 points (1.5 cr.), and the amount of contact teaching is 14 h/ point.

Recommended or required reading:
Literature (in English) introduced by the lecturers at the beginning of the course.

Grading:
Pass/fail

Person responsible:
Marja Ervasti

Other information:
Optional courses are not compulsory, if the amount of achieved points within Art and Practical Education otherwise exceeds 30.

408025S: Optional Studies: Basics of Educational Administration, 1 op

Voimassaolo: 01.08.2006 -
Opiskelumuoto: Advanced Studies
Laji: Course
Vastuuyksikkö: Faculty of Education
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:
1 cr

**Language of instruction:**
Finnish

**Contents:**
The course aims to give the students the necessary legal proficiency in relation to work as a public servant or in school administration. In addition, the students gain a good understanding of their own rights and obligations and are able to recognise situations when further information and/or help is needed. During the course, students will be introduced with the administrative system and public services in terms of set duties and opportunities as defined in legal regulations and norms.

**Assessment methods and criteria:**
Small-group work and practice assignment 4 h.

**Grading:**
pass/fail

**Person responsible:**
N.N.

**Other information:**
This is a part of the mandatory 416004A course Basics in educational administration.

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**410075P: Orientation to Work at School, 2 op**

**Voimassaalo:** 01.08.2006 -
**Opiskelumuoto:** Basic Studies
**Laji:** Practical training
**Vastuuysikkö:** Faculty of Education
**Arvostelu:** 1 - 5, pass, fail
**Opintokohteen kielet:** Finnish

**ECTS Credits:**
2 credits

**Language of instruction:**
Finnish

**Timing:**
School experience orientation takes place during the spring term of the first year.

**Learning outcomes:**
After completion the student will be able to:
- critically assess their conceptualisation of teacherhood and education.
- Observe class room activity
- Understand the contents and significance of curricula in schooling.

**Contents:**
School experience orientation is a part of the studies in the major subject at the Bachelor level. It is also a part of the pedagogical studies in teacher training. All the student teachers complete this practice period, irrespective of prior work experience.

The principle theme of this practice period is the student as an agent in the classroom community. The aim is for the students to build upon the themes and their individual levels of understanding of the Psychology of Education course and Pedagogy I seminar in a classroom context. In addition, this practice period will introduce the students to curriculum and its flexible implementation in teaching. School experience orientation will offer the students a guided opportunity to investigate child development and interaction in a classroom environment, as well as relevant socio-cultural phenomena, based on the work and discussion in Pedagogy I. In the School experience orientation period, the students are introduced to the teaching profession by participating in the teaching and learning activities of their own student class groups and those of neighbouring classes (school units).

**Learning activities and teaching methods:**
**Place:** Oulu Normal School, grade level 0-6.

**Requirements:** Psychology in Education course, participation in Pedagogy I seminar.

**Registration:** There is no need to register separately for this course. All students participating in Pedagogy I have been registered for this particular practice period. Please note that all other practice periods will require registration.

**Duration:** 2 calendar weeks

**Description:** During School experience orientation the student will work in cooperation with the staff of the normal school and fellow student teachers. The student will observe and monitor the class and pupil activity from both the educational sciences perspective and the developmental psychology perspective, based on the knowledge acquired during the Psychology of Education course and Pedagogy I. The students will familiarise themselves
with the school as an environment of learning and growing, and get to know the school's curriculum, especially at the general level.

The School experience orientation practice period will begin the week prior to the arranged practice period with a joint planning session, in which all the organizational and supervisory aspects, as well as appointment of the School experience orientation classroom groups (in which the planning will continue). All the persons participating in the practice period will be present during these plenary sessions. During the practice period, the student will get to know the class and perform set observation tasks.

During the second week, students will carry out small/scale teaching tasks either together with lecturers/teachers at the normal school and fellow student teachers by teaching smaller pupil groups or jointly holding small parts of lessons and familiarising themselves with the activities of the neighbouring classes/units for 2-3 hours (max. 6 student teachers/classroom).

**Supervision:** The general supervisor for the School experience orientation practice period will be the elementary level principal of the normal school. On-the-spot supervision in the classroom and school unit will be carried out by appointed teaching lecturers. Supervision in the main subject will focus on related aspects in Pedagogy I.

**Information seminar:** School experience orientation will begin with an information seminar held in the canteen of the 0-6 grade level normal school.

**Grading:**
The teaching lecturer of the class will assess student performance on the basis of evaluative discussions and the student's pedagogical portfolio (pass/conditional/retake). A successful pass will be marked in the teaching practice card, which will also be signed by the holder of the Pedagogy I seminar. There are separate guidelines for the subscribed contents and formats of the pedagogical portfolio. More information on this will be given during Pedagogy I.

**Evaluation seminar:** At the end of the School experience orientation practice period, an evaluation seminar will be held at the normal school, in which the objectives and outcomes of the practice period will be discussed, as well as how these experiences can be used in future teaching practice periods. A secretary chosen from among the student teachers will take down the minutes of the meeting, which will be sent in electronic form to all the participants of the school practice period no later than one week after the seminar.

**Person responsible:**
Teachers of Pedagogy I, Kasope school practice coordinator and the Oulu normal school practice team.

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**405023Y: Orientation to studies, 1 op**

Voimassaajo: 01.08.2006 -  
Opiskelumuoto: General Studies  
Laji: Course  
Vastuuysikkö: Faculty of Education  
Arvostelu: 1 - 5, pass, fail  
Opintokohteen kielet: Finnish  
Leikkaavuudet:  
ay405023Y Orientation to studies (OPEN UNI) 1.0 op

Ei opintojaksokuvausia.

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**406031A-01: Pedagogical Applications of Music Education, 3 op**

Voimassaajo: 01.08.2005 -  
Opiskelumuoto: Intermediate Studies  
Laji: Partial credit  
Vastuuysikkö: Faculty of Education  
Arvostelu: 1 - 5, pass, fail  
Opintokohteen kielet: Finnish  
Voidaan suorittaa useasti: Kyllä

Ei opintojaksokuvausia.
410076P: Pedagogical Seminar in Technology Education I, 3 op

Voimassaolo: 01.08.2006 -
Opiskelumuoto: Basic Studies
Laji: Course
Vastuuyksikkö: Faculty of Education
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:
3 cr

Language of instruction:
Finnish

Timing:
1st year

Learning outcomes:
For the students to learn skills in how to understand learner development, socio-cultural phenomena and interaction in the classroom in the context of technology education.

Contents:
Technology learning is viewed by emphasizing aspects of developmental psychology. During the course, students are introduced to explorative teacherhood and the importance of knowing the learner in the lower grades of primary. The seminar partly prepares students for the school experience orientation. The seminar is also integrated with the 405022Y course.

Learning activities and teaching methods:
The seminar focuses on aspects of technological learning over a period of studies in technology. Using a self-prepared construction-series, we design and realize a teaching situation, the theoretical foundation of which is provided by research in the area. Based on this, the teaching incident is analysed. The results of this analysis are presented in the form of a study journal. The course includes 24 h of lectures.

Recommended or required reading:

The availability of the literature can be checked from this link.

Grading:
pass/fail

Person responsible:
Matti Lindh

407034A: Pedagogical Seminar in Technology Education II, 3 op

Voimassaolo: 01.08.2005 -
Opiskelumuoto: Intermediate Studies
Laji: Course
Vastuuyksikkö: Faculty of Education
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
Learning outcomes:
The technology education pedagogical seminar II aims to teach students the different learning and teaching models and the application of technology-related learning environments in TE.

Contents:
During the seminar, we familiarize ourselves with issues relating to technology teaching and learning. With the help of different examples, experiments and demonstrations we develop learning materials and curricula for technology education which can be tested in real teaching situations. The seminar relates to education research in that it is linked with the a research paper (thesis) in technology education.

Learning activities and teaching methods:
Small-group sessions 24h.

Recommended or required reading:
Online material, seminar handouts, and the following publications:


See here for availability of coursebooks.

Assessment methods and criteria:
active participation in lectures, demonstrations and exercises, creating concrete materials and testing them in real teaching situations, reporting.

Grading:
pass/fail

Person responsible:
Matti Lindh

408023S: Pedagogical Seminar in Technology Education III, 3 op
ECTS Credits:
3 cr
Language of instruction:
Finnish
Timing:
Masters level
Learning outcomes:
The knowledge and skills obtained during this course help in the design and realisation of technology education at the lower primary level.

Contents:
In the seminar, we examine educational phenomena, professional practices and personal aspects of teacherhood in terms of technology education. The course is based on the opportunities provided by education in organizing teaching and learning with the objective of learning how to teach in understanding the technological world. The aim is also to learn how to plan teaching ethically and collectively with other teachers. The students' own learning is documented so that the collected material can be used in future teaching work. This can be used in conjunction with advanced level teaching practice courses.

We pay particular attention to the following areas:
- Forming a theory on technological learning based on one's own teaching and learning objectives
- Planning teaching in two topic areas using a self-formed theoretical base
- Assessing the theory and teaching of two other seminar participants

Learning activities and teaching methods:
Small-group sessions 24h, which also work to support the advanced level teaching practice course. Independent study 24h. Essay: Personal theory on technology education, its development and justifications using experiential knowledge and theory 32h

Recommended or required reading:


Technology for All Americans Project.

The availability of the literature can be checked from this link.

Assessment methods and criteria:
Active participation in seminar, writing a seminar report.

Grading:
Essay 0-5

Person responsible:
Matti Lindh

406033A-03: Pedagogical and Didactic Questions, 2 op
Contents: Product design, manufacture and evaluation processes are viewed within the framework of crafts, technology and art education. Teaching is problem-based and learning is assessed by means of portfolios.

Learning activities and teaching methods:
Lectures 10 h, small-group 18 h and independent work

Recommended or required reading:


Grading:
0-5

Person responsible:
Marjut Sarkkinen

406035A: Physical Education, 7 op

Contents: Physical education module acquaints with objectives, contents, and curriculum of school physical education. The aim is to gain sufficient knowledge and skills to cope with physical education teaching on the grades 0-6.

Learning outcomes:
Physical Education module consists of the following parts:

Orientation Toward Didactics and Pedagogy in Physical Education
- societal justifications of physical education
- physical education = education for physical exercise and education through physical exercise
- latest research in the field of physical exercise and physical education
Curriculum and the process of physical education
approaches towards teaching of physical education
adventure education

School Gym as a Physical Education Environment
- ball games, including ball handling, basketball, volleyball and floorball
- gymnastics

Snow, Ice, and Water as Physical Education Environments
- skiing
- skating
- swimming ability must be demonstrated

Immediate Environment of the School During the Autumn and Spring
- track and field
- out-door ball games, including football and baseball
- orienteering

Independent Work Part in Physical Education (LOTTO)
- preliminary, during and post tasks
- summaries of real lessons
- planning of exercises executed with the own group
- preparing for the exam
- learning and practicing swimming
- practicing of own physical exercise skills
- taking part in health-oriented exercising
- acquaint with physical exercise culture and school physical education events
- comprehensive P.E. task in the end of studies

Learning activities and teaching methods:
8 h lectures, 70 h small groups, 76h independent work.

Recommended or required reading:
The availability of the literature can be checked in this link.

Assessment methods and criteria:
Active participation during lessons, examination 2nd year, learning tasks.
Grading:
0-5
Person responsible:
Ari Rahikkala

406027A: Physics and Chemistry, 4 op

Voimassaolo: 01.08.2005 -
Opiskelumuoto: Intermediate Studies
Laji: Course
Vastuuyksikkö: Faculty of Education
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:
4 credits
Language of instruction:
English
Timing:
the 2nd year
Learning outcomes:
The course gives an overall picture of basic education in physics and chemistry. This involves gaining the basic knowledge and know-how of science and science education. The student becomes acquainted with concepts of physics and chemistry through sketching, emphasizing conception, discussing and experimental working as methods. S/he also gets a chance to design, implement and evaluate teaching of science. One important aim is to support the development of the student by arousing a personal interest to the subject and strengthening student's self-image as a producer and applier of science.

Contents:
The meaning of physics and chemistry for the humankind and modern society
National Core Curriculum for Basic Education, especially environmental and natural sciences and physics and chemistry
the nature of scientific knowledge
methods of teaching science
phenomena, concepts and experimental working concerning water, air, space, energy, motion, light, sound, electricity, magnetism and structure of matter from point of view of the didactics of physics and chemistry

Learning activities and teaching methods:
Small groups 38 h

Recommended or required reading:
National Core Curriculum for Basic Education 2004, environmental and natural sciences, physics and chemistry (www.oph.fi/english)

The availability of the literature can be checked from this link.

Person responsible:
Emilia Manninen

406023A: Religion, 2 op

Voi massaolo: 01.08.2005 -
Opiskelumuoto: Intermediate Studies
Laji: Course
Vastuuysikkö: Faculty of Education
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:
2 credits

Language of instruction:
English

Learning outcomes:
Students commit to a learning and studying process that helps them to put their deepening viewpoint in the context of a larger religion pedagogical framework. The process also promotes their ability to assess its significance for developing their religion teaching skills as part of their future professional competence and social activities.

Contents:
- Nature and importance of religion teaching as part of Finnish school education
- Significance of religion in the cultural context of Finnish society
- Significance of the religious viewpoint as part of childhood religious development and human growth
- Didactic questions and premises in religion teaching
- Relationship between religious education on one hand and multiculturalism and education for internationalism on the other

Recommended or required reading:
Literature (in English): Introduced by the M.Ed. lecturers at the beginning of the course.

Grading:
0-5

Person responsible:
Markku Salakka

411006A: Research course I, 10 op

Opiskelumuoto: Intermediate Studies
Laji: Course
Vastuuysikkö: Faculty of Education
Arvostelu: 1 - 5, pass, fail
Opettajat: Peltonen, Jouni Aslak
Opintokohteen kielet: Finnish
Voidaan suorittaa useasti: Kyllä

ECTS Credits:
10 cr

Language of instruction:
Finnish

Timing:
2nd and 3rd year

Learning outcomes:
The student
- knows the approaches and the most typical features of humanistic science.
- Can set and specify research questions
- Know the main features and foundations of research and the basic principles of implementing both quantitative and qualitative research.
- Knows and is able to apply typically used research methods
- Is able to apply descriptive statistical methods in analysing empirical data.
- Can prepare a research plan

Contents:
The course is divided into two main parts (a, b), of which a) is further divided into three subsections (1-3).

a. Quantitative research
1 Basis of research
- basic features of empirco-analytical research
- role of theory in research
- main stages of the research process
- formulating and shaping the research question
- types of research
- data collection
- accountability/reliability analysis
2 Statistical analysis
- describing one- and two dimensional empirical distribution
- foundations of statistical deduction
- estimation
- statistical testing
3 Exercises
- enhancing knowledge of content area in 1-2.

b. Qualitative research
- formulating and shaping research questions
- approaches to qualitative research
- progression of the research process
- the interview and observation in qualitative research

Learning activities and teaching methods:
a1) lectures 18h, a2) lectures 20h, a3) exercises 16h, assignment b) lectures 20h, exercises 16h and assignment.

Recommended or required reading:
Assessment methods and criteria: participation in lectures and exercises, completion of assignments and exams.

Grading: 0-5

Person responsible: Jouni Peltonen (part a), Markku Salakka (part b).

Other information: EduSc: if Research I has been completed, the student will complete equivalent credit worth of intermediate level studies in minor subject literature instead. ECEdu: set small-groups, Hannele Karikoski and Asko Pekkarinen.

413005S: Research course II, 10 op

Opiskelumuoto: Advanced Studies
Laji: Course
Vastuuysikkö: Faculty of Education
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits: 10 cr
Language of instruction: Finnish
Timing: 4th year
Learning outcomes: The students will have a profound knowledge of either qualitative or quantitative methods in educational research based on their choice. Students are able to build argumentation, analyse and interpret data, present results and discuss the results in the context of the theory and earlier research. Students are able to write a coherent, logical and justified research report and evaluate the reliability and ethics of the research.

Contents:
a) Quantitative research methods:
   • testing and estimating one and two populations
   • basic multivariate data analysis
   • modeling data with structural equations
b) Qualitative research methods:
   • perspectives of different paradigms in qualitative research
   • analyzing and interpreting qualitative data
   • reliability and validity of qualitative research
   • research report
   • ethical questions in research

Learning activities and teaching methods:
a) lectures 20 h and exercises 16 h
b) lectures 20 h and exercises 16 h

Recommended or required reading:
a) Quantitative methods:
   TAI

b) Qualitative methods:
   TAI
Course material availability can be checked here.

**Assessment methods and criteria:**
Active participation in the workshops and lectures.

**Grading:**
0-5

**Person responsible:**
Leena Syrjälä and Jouni Peltonen

**Other information:**
Educ. sciences and Early childhood education students study both quantitative and qualitative parts of Research course (10 cr).
Teacher education and Music education students study either quantitative or qualitative part of Research course (5 cr).

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**407032A: School Experience II: Bachelor's Level, 6 op**

**Voimassaolo:** 01.08.2006 -

**Opiskelumuoto:** Intermediate Studies

**Laji:** Practical training

**Vastuuysikkö:** Faculty of Education

**Arvostelu:** 1 - 5, pass, fail

**Opintokohteen kielet:** Finnish

**ECTS Credits:**
6 ECT

**Language of instruction:**
Finnish

**Timing:**
The Bachelor level school experience for multidisciplinary and for arts and crafts education programme students takes place during the spring term of the 2nd year.
The technology education students will also complete their practice period during the 2nd year, but during the autumn term.

**Learning outcomes:**
After completion, the student will be able to:
- analyse their own perspectives on teaching and pedagogy
- understand the significance of responsibility/accountability in pedagogy
- plan and realize teaching according to curricula and lesson plans
- appreciate the distinctive features of different subjects
- evaluate student performance and learning
- evaluate their own teaching
- be familiar with professional working habits and apply them

**Contents:**

**Content and themes:**
The School Work in the Bachelor Phase practice period forms a part of the Bachelor Level degree under the course entities of Multidisciplinary Studies in the Subjects (MSS/ 3 ECTs) and Cross-curricular Themes taught in Basic Education (CCT/ 3 ECTs).
The principle theme is teaching and learning. During the practice period the students are expected to enhance their working knowledge and understanding of the topics covered in their Guidance in Learning, Lesson planning and Assessment courses and Pedagogy II by practical work in a school and classroom environment. In addition, the practice will introduce new themes: kinds of learning, learning problems and student care.
The School Work in the Bachelor Phase period provides the students with the possibility to practice basic skills as well as work on their planning, realizing and evaluating skills. Students become familiar with planning at different levels - from single lesson plans to curricula and using flexible and situation-specific teaching approaches in their teaching to critical assessment.
Hence, it is possible for the students to familiarize themselves with important phenomena and core concepts in pedagogical activity, e.g. the pedagogical relationship, discretion, facing the child, and teacher responsibility. The student is also given the chance to take notice of and explore the link between educational research and teaching. The Arts and Crafts education students will, in addition, investigate the role of art education in the school's daily life and explore learning through art.

**Learning activities and teaching methods:**

**Place:**
Oulu Normal School (teaching school), grades 0-6

**Requirements:** Before commencing The School Work in the Bachelor Phase, the student must have completed at least 50 ECTs of their Bachelor level studies, including Mathematical Didactics Part I (3 ECTs), Reading and Literature, (3 ECTS) and the Orientation practice period. In addition, the student must have begun Pedagogy II (3 ECTS).

**Registration:**
- Multi-disciplinary and Arts and Crafts education programmes,
- Registration takes place during Autumn Term of the 2nd year (by the end of November).
- Technology Education students. Registration takes place during Spring Term of the 1st year (by the end of April).
- The students must register for their The School Work in the Bachelor Phase with an electronic form that is handed into the student office of the education department. The registration form must be filled in carefully. The form can be found online on the homepages of the educational sciences and the teacher training departments. Please note that the form can only be accessed during registration time.

**Duration:** 6 calendar weeks

**Description:**
The School Work in the Bachelor Phase constitutes 160 h half of which is at a specified time and place at the normal school, including both lesson-observation and supervisions.
The School Work in the Bachelor Phase will involve practicing teaching in either Maths or Finnish (A1), in accordance with class level and lesson resources. In addition, the student will teach at least one Arts and Crafts subject (Physical Education, Art, Music, Textiles, or Technical Crafts).
The student will also teach one of the following subjects: History, Religion/World Views, Physics and Chemistry, Biology, Geography, Environmental Sciences. There will be a total of 20 lessons, of which 8 are during group-work weeks and 12 during independent teaching weeks. Apart from lesson-holding, the students will also follow classes in a second Arts and Crafts subject for a total of 4 lessons.
The remaining 56 hours of pre-set school practice work consists of actively following the assigned homeroom's various lessons and the supervision sessions given by the teaching lecturer and the KASOPE (Educational Sciences and Training Dept) staff.
During the practice programme, the level of independence in teaching will grow gradually. In the beginning, the work will be undertaken in groups formed of fellow students and an appointed teacher, and only later will it be undertaken at a more independent level. This way the six week practice period forms two different stages:

a) Group work (weeks 1-3) and
b) Independent work (weeks 4-6)

During the group work stage, emphasis will be placed on the basic skills involving lesson-planning, lesson-holding, and evaluation for different pupil-groups and situations. During the independent work stage, the aim is for the teacher student to come up with new ideas and try out different teaching methods according to the pupils' ways of learning and subject-specific teaching methods.

**Supervision:** During The School Work in the Bachelor Phase, supervision will be provided by the teaching lecturers at normal school. Supervision in different subject didactics will be provided by Kasope in either Maths or Finnish (A1).
It is possible for the student to receive subject didactics guidance in the other taught subjects. Enquiries should be made to the relevant subject didactics lecturer.

**Information seminar:** The School Work in the Bachelor Phase will begin with an information seminar in the canteen of the normal primary school (0-6).

**Grading:**
The teaching lecturer of the class will assess student performance on the basis of assessment discussions and the student's pedagogical portfolio on a scale of pass/conditional/retake. A successful pass will be marked in the teaching practice card, which will also be signed by the Maths or Finnish A1 subject didactics lecturer.

**Person responsible:**
Teaching practice coordinator at Kasope and the teaching practice team at Oulu Normal School.

**408020S: School Work in the Master Phase, 11 op**

Voimassaolo: 01.08.2006 -
Opiskelumuoto: Advanced Studies
ECTS Credits: 11 ECT

Timing:
School Experience Masters Level can be completed at the Oulu Normal School during either the Autumn or Spring terms. The practice period takes place during the 4th or 5th year of study.

Learning outcomes:
After completion, the students will
- have a clear idea of teaching and pedagogical perspectives
- understand the unique features of different subjects and subject groups and be able to apply this knowledge in practice
- teach in accordance with lesson plans and curricula
- recognize the importance of cooperation between the school and home.
- evaluate their own role as an educator
- create, use and evaluate lesson materials.

Contents:
The practice programme constitutes a part of the pedagogical studies at the Masters level, and falls under the courses Education and Teaching in Transition (5 ECTS) and Pedagogy III (3 ECTS).

At the Masters level, the practice period follows the theme of viewing oneself as a teacher and educator (I, the Teacher). The aim of the practice period is for the students to deepen and expand their working knowledge and understanding of the topics covered in Education and Teaching in Transition and Pedagogy III through practical work experience in the context of the school and the classroom.

The practice period focuses on taking complete responsibility for the classroom. The students engage in all the activities for which a teacher is responsible.

The period provides the students with a guided opportunity to plan study periods on the basis of curricula and subject material and to become familiar with the distinctive didactic features of different subjects.

During the practice period, students will assess their own teacherhood from different perspectives - teachers as influential actors in society, educational ethics and morality. The students will also participate in collaboration between the school and home. Based on their own practical experience, they will investigate the core phenomena and concepts behind pedagogical activity, e.g. the pedagogical relationship, discretion, facing the child and teacher responsibility, with the aim of developing the knowledge they already have. The students are also given an opportunity to consider how educational research affects the work of a teacher and to conduct educational research relating to the teaching profession.

The Arts and Crafts education students will also consider the significance of teaching and making art in relation to the teacher's own perspectives on theory in art education. In addition, they will investigate their teaching practice in relation to their own art education: what does being an art teacher mean?

Learning activities and teaching methods:
Place: Oulu Normal School, grades 0-6. Those students completing the 60 ECTs minor subject have the possibility of completing this practice period at the normal school at grade level 7-9.

Requirements: In order to participate in, the student must have successfully completed: school experience orientation, Bachelor level school experience, and their Multi-disciplinary Studies in the Subjects (MSS) and Cross-curricular themes taught in basic education (CT) (total 60 ECTS). In addition, the student must have a minimum of 10 ECTs of completed minor subject studies at the start of this school experience period.

If the students have chosen to complete the 60 ECT minor subject studies, they can complete an advanced minor subject to teach at grade level 7-9. The minor subject can also be completed at a different time than the practice period.

The right to do a practice period in the minor subject at grade level 7-9 is gained when the practice requirements are fulfilled and 25 out of the 60 ECTs of the taught minor subject have been completed.

Please note that this requirement must be fulfilled by the commencement of the school practice period, not during registration. In unclear situations, the person responsible for the course will determine the right to participate. The advanced minor subject school practice period can also be done at 0-6 grade level.

Registration:
- For the autumn practice session, please register by the end of April in the preceding spring term.
- For the spring practice session, please register by the end of November in the preceding autumn term.
- The student must register for their School Experience Masters Level with an electronic form that is directed to the student office of the education department. The registration form must be filled in carefully. The form can be found online on the homepages of the educational sciences and the teacher training departments. Please note that the form can only be accessed during registration time. Students are expected to inform which minor subjects
they intend include in their in-school practice. Other relevant information regarding participation in subject didactic research groups or courses can also be included. If the student intends to collect data for a Masters thesis, it is advisable to inform of this on the form as well.

If the students would like to complete school practice in their advanced/extended minor subject at the 7-9 grade levels, they should personally inform the person responsible for coordinating 7-9 grade level school practice when registering for the School Experience Masters Level.

**Duration:** 8 calendar weeks

**Description:** The Masters level school practice period covers 295 h, of which 135-145 h is work at a specified time and school, following classes and guidance sessions. These include:

**Holding lessons:** The students will hold 60 lessons during this practice period. Of these, a section or block will be subject-specific, i.e. either Maths or Finnish (A1) and two taught minor subjects (min. 7h per subject). The rest of the lessons will be in blocks of either entire school days or even weeks. The students will plan the syllabi together with the teaching lecturer of the class and the relevant subject didactics lecturers.

Should the students want to do their school practice for their advanced/extended minor subject at a higher grade level, these school sessions will be subtracted from their subject-specific lessons.

**Assistant teacher:** The students work as assistant teachers for 10-15 lessons which are taught by fellow student teachers. At the same time, the students observe and follow the held lessons and participate in the evaluation discussions with fellow student teachers and supervisors.

**Other forms of work within a school:** This practice period also contains 10-15h work relating to the practical aspects of teaching, school and/or educational sciences, e.g. project work. A project could be:

- research plan-based data collection for the Masters thesis or similar diploma work
- assignment(s) for a specialisation course related to teaching practice.
- Functions at the normal school, e.g. parent evenings, student exhibitions, UNESCO-themes, school camps, art productions, collaborations or projects with different cultural facilities, or other functions.
- Following lessons: The students will actively follow lessons in their assigned homeroom for 25-30 h. During this, the students will familiarize themselves with the class. This may involve related assignments given by the teacher or the subject didactics lecturer. Teacher-lecturers at the normal school provide students with guidance during the School Experience Masters Level practice period. Also, students will seek subject didactics supervision in at least 4 subjects; in all the subject-specific blocks and in one elective subject in which the students must hold at least 3 lessons. There will be 25-30 guidance sessions. The planning, implementation and assessment of lesson- and curricular planning will be done comparatively among fellow students and teachers, the class teacher and the Kasope staff (depending on the nature of the school practice sessions). The lecturer will assess student performance on the basis of evaluation discussions and pedagogical portfolios on the scale of pass/conditional/retake. A successful pass will be registered in the student's teaching practice card.

**Information seminars:** The School Experience Masters Level practice period will commence with an information seminar in the canteen at the 0-6 grade level school at the Oulu Normal School.

**Grading:**
The teaching lecturer of the class will assess student performance on the basis of assessment discussions and the student's pedagogical portfolio on a scale of pass/conditional/retake. A successful pass will be marked in the teaching practice card, which will also be signed by 5 didactics lecturers.

**Person responsible:**
Practice period coordinator and the Oulu normal school practice team.

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**407033A: Science Culture and Technology, 2 op**

**Voimassaolo:** 01.08.2005 -

**Opiskelumuoto:** Intermediate Studies

**Laji:** Course

**Vastuuyksikkö:** Faculty of Education

**Arvostelu:** 1 - 5, pass, fail

**Opintokohteen kielet:** Finnish

**ECTS Credits:**
3 cr

**Language of instruction:**
Finnish

**Timing:**
2nd year

**Learning outcomes:**
After completion students will have a clear picture of the developmental stages of maths and natural sciences and the nature of scientific and mathematical knowledge and practice.
Students are familiar with the world view according natural sciences and its foundations. Students understand the significance of maths and natural sciences in technological knowledge and practice and in their mutual interaction. Students have the capacity to cover these themes in their own teaching work.

Contents:

Learning activities and teaching methods:
Lectures, projects and a study which emphasizes the educational aspects of the chosen theme.

Recommended or required reading:
Lecture materials on the course webpages, material produced during the course.

Assessment methods and criteria:
Completion of set assignments.

Grading:
0-5

Person responsible:
Lasse Jalonen

410013Y: Scientific communication I, 2 op

Opiskelumuoto: Language and Communication Studies
Laji: Course
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:
2 cr

Language of instruction:
Finnish

Timing:
1st year

Learning outcomes:
After completion, the students will be aware of the different types of scientific communication and are able to produce linguistically and stylistically impeccable scientific text. The students are also able to assess and edit their own text. In addition, the students are able to critically analyse the stylistic features when reading scientific text.

Contents:
- foundations of scientific communication
- genres and styles
- grammatical and stylistic demands of impeccable scientific writing and the foundations of various formalities
- core referencing skills
- text analysis and text production

Learning activities and teaching methods:
Lectures and small-group work 16h and independent study.

Recommended or required reading:
Can be found online (click title)

Assessment methods and criteria:
Participation in teaching sessions, independent written assignment.

Grading:
pass/fail

Person responsible:
Minna Sääskilahti

410019Y: Scientific communication II, 2 op

Opiskelumuoto: Language and Communication Studies
ECTS Credits:
2 cr

Language of instruction:
Finnish

Timing:
4 th year

Learning outcomes:
After completion, the students
- are able to apply their skills in scientific communication is the production of larger scientific texts, e.g. a master's thesis.
- Are able to identify problem-areas and to develop their own writing skills.
- In addition, the students are aware of cultural differences in writing scientific text.

Contents:
- special features of the master's thesis as academic work
- The Masters thesis as a writing process
- Comparative examination of scientific texts in different languages
- Popular scientific writing

Learning activities and teaching methods:
Lectures and small-group sessions 16h, independent study.

Assessment methods and criteria:
Participation in teaching sessions and independent written assignment.

Grading:
pass/fail

Person responsible:
Minna Sääskilahti

410070P: Sociology of education, 4 op

Voimassaolo: 01.08.2005 -
Opiskelumuoto: Basic Studies
Laji: Course
Vastuuysikkö: Faculty of Education
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Learning outcomes:
After completion the student will be able to visualize:
- the links between educational sociology, sociology and education.
- Basic issues and concepts in social sciences and educational sociology
- The Finnish education system and educational politics as a part of social politics

Contents:
- central concepts in social sciences
- basic concepts and issues in educational sociology
- sociology of education: links to education and sociology
- the roles of socialization and education
- classic trends in the educational sociology: structuralism, conflict-theory and critical sociology, and
  socialization theory and interaction
- the Finnish education system: past, present and future
- education politics as a part of social politics
- theoretical and practical issues in educational sociology: school practices (interaction-based school class
  research), hidden curriculum, equality of education, identity, normality and deviation.

Learning activities and teaching methods:
Lectures and other teaching 18 h and independent study.

Recommended or required reading:
  tarkasteluun.
Course material availability can be checked here.

Assessment methods and criteria:
Exam
Grading:
pass/fail

Person responsible:
Veli-Matti Ulvinen

Other information:
In the early childhood education programme, this course consists of two parts, 01 and 02. Students can
find more information on coursework and reading material in the relevant section of the course guide.

407026A: Special Education, 3 op

Opiskelumuoto: Intermediate Studies
Laji: Course
Vastuuyksikkö: Faculty of Education
Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits:
3 cr

Language of instruction:
Finnish

Timing:
2nd year

Learning outcomes:
The students are able to prepare personal a plan of action for encountering special education. After completion
the student is able to find additional information and collaborative partners for different special education
situations on their own. The student is able to discuss the topic using published studies and relevant scientific
terminology.

Contents:
- encountering difference/variance
- identifying student need for special education
- responding to special education needs with pedagogical means
- educational rehabilitation
- school student care
- The POSP (personal organized schooling plan) as a teacher's instrument
- Inclusive education

Learning activities and teaching methods:
Lectures 16h, small-group sessions 10h, independent work.

Recommended or required reading:
  perustelua.

The availability of the literature can be checked from this link.
Assessment methods and criteria:
Lectures 16h, small-group sessions 10h, independent work.
Grading:
pass/fail
Person responsible:
Marko Kielinen

410016Y: Speech Communication, 2 op

Opiskelumuoto: Language and Communication Studies
Laji: Course
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:
2 cr
Language of instruction:
Finnish
Timing:
1 st or 4 th (KAKO)
Learning outcomes:
The students are equipped with basic skills in speech communication. They can apply speech communication didactics and the principles of drama education. In addition, the students are able to experiment using aspects of artistic expression education in their work.
Contents:
- speech communication as a science
- core theories and concepts
- identification and analysis of speech communication situations in working life
- studying and developing personal communication styles

Learning activities and teaching methods:
Small-group work 20h, independent study.
Assessment methods and criteria:
Participation in contact teaching sessions, independent written assignment/exam.
Grading:
pass/fail
Person responsible:
N.N.
Other information:
EduSci students: If this course was already completed in the B(Ed) studies, Scientific Communication II must be completed.
A&CEd: completed jointly with Drama Education Project 406039A.

407024A: Teacher as a Pedagogical Thinker and Agent, 3 op

Voimassaolo: 01.08.2005 -
Opiskelumuoto: Intermediate Studies
Laji: Course
Vastuuysikkö: Faculty of Education
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:
3 cr
Language of instruction:
Learning outcomes:
During the course we learn about the nature of the teacher's knowledge and pedagogical thought, core concepts and recent research. We learn conceptual tools that help us examine pedagogical work especially in terms of learner management and communication. These themes also cover recent topics such as work space and peace, bullying and friendship in schools. In addition, we may look at various issues depending on student interest. After completion, the students are able to reflect on their pedagogical thinking with relevant concepts and develop their knowledge of teacherhood. They can apply learning management skills in their teaching, develop their forms of communication and enhance develop communication within a learner group.

Contents:
- teacher knowledge, its nature and forms
- pedagogical relationship and tact
- recent issues: teacher's and school's educational practices

Learning activities and teaching methods:
Lectures and/or small-group sessions 32h, study group and/or independent study 16h, literature study 16h, essay 16h.

Recommended or required reading:

The availability of the literature can be checked from this link.

Assessment methods and criteria:
Participation in lectures and group discussions, an essay on the lectures and literature, completion of lecture exercises or exam.

Grading:
0 - 5

Person responsible:
Tuulikki Tuominen

408021S: Theme-based Practice, 6 op

Voimassaolo: 01.08.2006 -
Opiskelumuoto: Advanced Studies
Laji: Practical training
Vastuuysikkö: Faculty of Education
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:
6 ECT

Language of instruction:
Finnish

Timing:
Thematic practice takes place during the Masters stage of the teacher training programme during a period chosen by the student, or alternatively during a longer time period (overlapping with Bachelors studies)

Learning outcomes:
The practice is a part of the Masters Degree studies and is a part of the pedagogical studies undertaken by the student. As the name implies, the practice period bears a theme of the students' own choices but which are based on their previous pedagogical studies and/or research studies. The theme could, for example, be based on certain area within schooling, a minor subject or another part of the students' studies, e.g. the Masters thesis. During this practice period, the students can gather data for their Masters thesis. The Thematic practice can also be viewed as a kind of internship.
One of the main features of Thematic practice is independent study, i.e. student autonomy. The students themselves are responsible for the completion of this particular practice period.

Students are responsible for:
- planning and implementing the theme-based practice
- seeking guidance and arranging for a student advisor
- finding a venue/internship and a host supervisor
- planning the evaluation and its implementation
- Implementation of this particular practice period will be negotiated with relevant supervisors

Primary education students will complete their theme-based practice, despite any previous work experience. After the practice period the student will be able to:
- be familiar with the multiple layers of the education realm
- analyze the different perspectives of educational work and be able to apply them in various contexts and assignments within educational work.
- Apply a set of a research data in experimental or developmental work, or gain other relevant skills
- Apply their skills and knowledge in planning project-work.

Contents:
Thematic practice provides an opportunity for experimental, developmental or research activity with different actors and partners in the education field. The aim of the practice period is to support the student in gaining expertise in an area of particular interest to the student. During the Thematic practice the student can familiarize him/herself on a broader level with the teaching profession and/or focus in-depth on a more specific area of interest. It is possible to complete this practice period as a more long-term period of research- or development work which is related to the pedagogical studies and/or research studies undertaken before the practice period begins.

Familiarizing with the education field on a broader level provides the student with the opportunity to expand their experience of working as a teacher on a more civic level, vocational level, or within an educational organization or project that does not fall in the 0-6 grade level. In this form of practical experience, the student him/herself is responsible for planning the contents, implementation and evaluation of the practice period and the undertaken work's relevance within the education system. The subject, thematic foundation or the research area are decided between the student and the supervisor.

Applying themselves in a particular field in education provides the student with the chance to deepen their working knowledge of the various themes that arise in their previous and current studies. The Thematic practice experience should involve either educational, guidance, or teaching work.

Learning activities and teaching methods:
Implementation: One place is sufficient. The practice period can be divided into 2 or 3 different time periods, and can also take place at different work places.

The practice venue must be a public or third sector organization, whose function falls under education, training, schooling or teaching. The internship can take place abroad. It can also take place at a normal school. Especially the Arts and crafts teacher programme the Thematic practice can take place jointly with different cultural bodies, involving e.g. project planning and implementation or education provision for special student groups.

Requirements: Student may begin this practice period after successful completion of the following: school experience orientation (2ECT), Bachelor Level School practice period (6 ECT), min. 20 ECTS basic studies of the teacher training programme, and min. 20 ECTS of teacher training major subject studies. Students that have completed their advanced general educational studies are also required to have completed at least one study period of their advanced level studies in education.

Different types of practice periods and their durations: The practice period can be completed in either one place or be divided into 2-3 at least parts (min 2ECT each).

A) Work practice
This type of practice is completed by engaging in work in the educational field. The experience will expand the teacher trainee's views on the various different jobs within the teaching profession, OR the cooperation among various different social bodies related to education, OR work in an educational organization.
Multi-dimensional teacherhood: kindergarten teacher, special education teacher, special education class teacher, subject teacher, vocational teacher, general studies teacher, elective civic studies teacher, student tutor, homeroom teacher.
Multi-sectoral cooperation: e.g. social services in child protection, school curator, school healthcare, speech therapy, school counsellor.
Cultural field: e.g. involvement in an art project or organisational duties in a cultural organisation, art therapy, special education classes and schools.
Other pedagogical field: other work with children, youths, or participation in a pedagogical organisation.
Qualifications in these sectors or attained in other training programmes, so familiarisation with these activities can only be done in the form of work experience under the direction of a person actually working in the particular field. 30-40 h work will correspond to 2 ECTS, depending on the demands of the work in question. In addition, the student will reserve time for planning and evaluation (incl. writing a report).
B) Research and development activity. E.g. projects; experimental educational projects; developing their professional knowledge base, data collection or other forms of research work related to the Masters thesis. In addition, the student will reserve time for planning and evaluation (incl. writing a report).

C) Other form of school experience. E.g. special education schools, special services units, student groups in small rural schools, supervising groups of integrated students, field schools, normal schools, kindergartens, student groups within schools, after school activities, student clubs activity, arts classes (also arts programme classes), educational/training within organisations.

When completing other form of school experience, the students will hold 12-15 lessons and will observe actively, possibly also working as a teacher's aide for 12-15 lessons, amounting to a total of 2 ECTS. In addition, the students will reserve time for planning and writing a report on their work experience period.

This form of work experience will also require a supervisor from the school in question, who will monitor the student's lessons and give feedback.

The work practice period can also be constructed in such a way that it is spread among a longer period of time, e.g. the whole year. The amount of credits given will be determined according to the hours mentioned in A) and B).

Planning and reporting:
The practice period begins accordingly with designing a plan and ends with the completion of a report of the work experience activities.

Work Experience Plan:
This plan is an open-format, pedagogically justified description of the intended work practice period, which will be approved by the supervisor assigned to this work practice period. It should include the following:
- the theme of the work practice period
- venue and schedule
- connection to studies, the theme related to the planned work practice activities.
- set personal objectives
- arranged supervision and its implementation
- how the work practice period will be evaluated

Work Experience Report:
The report is based on the theme of the work experience period. The form of the report will be agreed on upon the approval of the work experience plan by the student advisor at the university. The length of the report depends on the parameters of the work experience period in general. Theme-based practice is an advanced level study and must, for that reason, also contain theoretical aspects, base itself on scientific literature, and also explain how the latter relate to the theme and activities of the work experience period. If the practice period has been divided into multiple parts, a plan and report for each inclusive period must be completed separately. The collective length of the written work will correspond to the general length of the plan and report as if done in a single period.

The Masters thesis cannot function as the report, should the student choose to do research activity for their TB-practice. On the other hand, the report can be used for the Masters thesis text.

Registration:
The student deliver a letter to the relevant person from Kasope, requesting permission for the work experience to take place. Consent is signed by both the hosting supervisor and a representative from Kasope, who will also function as the student's supervisor at the university. The student will deliver copies of the signed letter of consent to both. The Kasope representative's date of signature is the date of registration for this particular practice period. The Kasope student advisor will keep the consent letter for the duration of the practice period (at minimum).

Supervision:
The students will independently arrange for an advisor from Kasope depending on the theme of the work experience. Supervision is divided into two sessions, pre-work experience guidance, and post-work experience guidance (2 h altogether). During the pre-work experience guidance session, the plan will be discussed and will then be approved by the supervisor. During the post-work experience guidance session the work experience itself will be discussed retrospectively with reference to the objectives outlined in the pre-work experience guidance session.

If the work practice is a form of school experience, the student should arrange for a host advisor and for a supervisor in other forms of work experience.

Grading:
The evaluation will be based on the students' own assessments of the work experience and the feedback material collected by the students during the course of the work experience period. The students will inform the student advisor regarding the evaluative framework and implementation of the work experience period in question.

The Kasope student advisor will be responsible for approval of the work experience period.

Person responsible:
Kasope teaching practice coordinator

406034A-01: Traditional Handicrafts in the Context of Technical Work, 3 op
Voimassaalo: 01.08.2005 -
406033A-02: User-Centred Design and Manufacture as an Approach to Crafts nad Technology Problems, 2 op

ECTS Credits:
2 cr

Language of instruction:
Finnish

Timing:
1st year

Contents:
This course familiarizes students with user-centered design and problem solving in crafts and technology. They collaborate to design and manufacture a functional prototype that solves a particular problem. Theoretical contents and practical processes are documented and analyzed using the portfolio approach. The course also includes excursions.

Learning activities and teaching methods:
Lectures 8 h, small-group work 20 h and independent work 26 h.

Recommended or required reading:

Grading:
0-5

Person responsible:
Marjut Sarkkinen

406031A-02: Voice and Singing, 1 op

ECTS Credits:
1 cr

Language of instruction:
Finnish

Grading:
0-5

Person responsible:
Marjut Sarkkinen