## Opasraportti

# KTK - Pedagogical Studies for Teachers 2011-2012 (2011 - 2012)

Any courses that are no longer being offered have been removed from the Courses tab in this study guide.

A new study guide for the secondary teachers' pedagogical studies has been constructed in the spring of 2012, and it will become available on Weboodi by the autum. At the bottom of the page you can find the timing diagram and structure of the new curriculum, according to which the new students admitted to secondary teacher education pursue their studies.

Pedagogical studies in the subject teacher education is a 1-year education programme that focuses on secondary education. It enables students to develop the skills, competencies and knowledge for professional educational tasks as a subject teacher.

The studies are divided into basic and intermediate studies.

Basic studies: students are aware of issues related to children and youngsters development and to constantly changing nature of education and society. They are able to apply new facts, concepts, theories and techniques in teaching, studying and learning.

Intermediate studies: students are able to integrate educational theory with school practices; they are aware of various research methodologies and are able to examine knowledge and phenomena critically, analytically and contextually.

#### BA graduate is able to

- 1. collect pedagogically relevant items to personal pedagogical portfolio.
- 2. describe the range of the application of pedagogy/pedagogical content knowledge.
- 3. explicate his/her one's understanding of the subject knowledge to the pupils.
- 4. examine the special educational needs of pupils.
- 5. show ability to work in challenging educational environments.
- 6. adapt his/her behaviour in different educational and teaching situations.
- 7. use various teaching methods and to utilise learning environments.
- 8. take responsibility of his/her own actions and support the learners' self-efficacy.
- 9. judge the applicability of subject knowledge within the framework of the curriculum.
- 10. show empathy and tact and can select and judge his/her own actions according to the situation.

#### MA graduate is able to

- 1. construct a pedagogically relevant portfolio.
- 2. ponder the nature of pedagogical action and the applicability of the pedagogical theory.
- 3. discuss the assessment and evaluation of learning.
- 4. examine the special educational needs of pupils.
- 5. evaluate his/her own ability to work in challenging educational environments.
- 6. adapt his/her behaviour in different educational and teaching situations.
- 7. use various teaching methods and to utilise learning environments.
- 8. take responsibility of his/her own actions and support the learners' self-efficacy.
- 9. collaborate in a multi-professional environment.
- 10. analyze and explain the theoretical knowledge about education, teaching and the subject.
- 11. judge the applicability of subject knowledge within the framework of the curriculum.
- 12. recognise creativity in the field of education and teaching.
- 13. show empathy and tact and can select and judge his/her own actions according to the situation.

- 14. explicate research in inquiry based teaching.
- 15. participate in planning, development and evaluation tasks in education.
- 16. knowledge generalization, to design and invent theoretical knowledge, and apply it to teaching.

The timing diagram for the new study guide (secondary teachers' pedagogical studies)

#### **Pedagogical studies**

Code	Name	3rd year, spring	4th year, autumn
410067P	Basic course in education	4	
410068P	Didactics	4	
410069P	Educational psychology	4	
410070P	Sociology of education		4
410071P	Educational philosophy		4
410083P	Pedagogical Seminar	3	
050110A	Subject Didactics I	3	
050210A	Subject Didactics II	3	
050310A	Subject Didactics III	1	
050410A	Research in Subject Didactics		8
050081A	Basic Practice	5	
050082A	Advanced Practice I		6
050083A	Advanced Practice II		6
416004P	Educational Administration		1
050085A	Special Education		1
050091A	Optional studies	3	

## Tutkintorakenteisiin kuulumattomat opintokokonaisuudet ja jaksot

050082A: Advanced teaching practice I, 6 op 050083A: Advanced teaching practice II, 6 op 050084A: Applied teaching practice, 2 op 410067P: Basic course in education, 4 op 050081A: Basic teaching practice, 5 op 410068P: Didactics, 4 op 410071P: Educational philosophy, 4 op 410069P: Educational psychology, 4 op 410017Y: Multimedia as a learning project, 2 op 416012A: Optional cource: basics of educational administration, 1 op 050091A: Optional studies, 3 op 407028A: Pedagogical Seminar II, 3 op 410074P: Pedagogical seminar I, 3 op 050073A-05: SD III Biology and Geography, 2 op 050073A-01: SD III Finnish Language and Literature, 2 op 050073A-03: SD III Foreign Languages, 2 op 050073A-02: SD III History, 2 op 050073A-04: SD III Mathematics and Natural Sciences, 2 op 050073A-06: SD III Music Education, 2 op 050074A-05: SD IV Biology and Geography, 5 op 050074A-01: SD IV Finnish Language and Literature, 5 op

050074A-03: SD IV Foreign Languages, 5 op 050074A-02: SD IV History, 5 op 050074A-04: SD IV Mathematics and Natural Sciences, 5 op 050074A-06: SD IV Music Education, 5 op 410070P: Sociology of education, 4 op 050073A: Subject didactics III, 2 op 050074A: Subject didactics IV, 5 op

## Opintojaksojen kuvaukset

## Tutkintorakenteisiin kuulumattomien opintokokonaisuuksien ja -jaksojen kuvaukset

## 050082A: Advanced teaching practice I, 6 op

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

ECTS Credits: 6 cr Language of instruction: Finnish Timing: 4th year autumn Learning outcomes: Upon completion of the course, the student • understands the significance of the responsibility of the teacher and is capable of assuming independently responsibility for his/her work as a teacher

- understands the meaning of cooperation between home and school
- is capable of using the knowledge and skills learnt previously and working independently with pupils
- knows how to apply his/her knowledge of assessment and to plan and implement assessment of study performance

#### **Contents:**

The course consists of the following:

- Goal-oriented planning, execution and evaluation of lessons
- · Observing and analysing teaching
- Teacher Training School's didactics and special features in stduent's own subject
- ICT in teaching
- · individual and group tutoring
- independent study

#### Mode of delivery:

Face-to-face teaching

#### Learning activities and teaching methods:

Contact teaching 60 h, independent work 100 h

#### Target group:

Students pursuing Pedagogical Studies for Secondary Teachers.

#### Prerequisites and co-requisites:

None.

#### **Recommended optional programme components:**

Other courses in the Pedagogical Studies for Teachers.

Recommended or required reading: To be announced at the start of the course Assessment methods and criteria: Attendance in teaching and independent work. Grading: Pass/fail Person responsible: Oulu Teacher Training School Working life cooperation: Yes. Teaching practice.

## 050083A: Advanced teaching practice II, 6 op

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

ECTS Credits: 6 cr Language of instruction: Finnish Timing: 4th year autumn Learning outcomes:

Having completed the course, the student

- knows how to apply the knowledge s/he has learnt and how to take independently and actively responsibility for his/her work as a teacher
- understands the significance of multiprofessional cooperation in teaching activities
- understands the meaning of pupil welfare in the teacher's work
- knows how to analyse and apply the knowledge and skills obtained in previous studies to work independently with students
- is able to analyse the significance of evaluation in teachers' work and to apply this knowledge to the planning and implementation of the evaluation of teaching acts

#### Contents:

The course consists of the following:

- independent, goal-oriented planning, execution and assessment of broad teaching entities.
- taking responsibility for all the subareas of teachers' work
- gaining a more in-depth perspective of the teaching profession (other than teaching one's own subject)
- familiarisation with teaching in grades 0-6

## Mode of delivery:

Face-to-face teaching

#### Learning activities and teaching methods:

Contact teaching 60 h, independent work 100 h

Target group:

Students pursuing the Pedagogical Studies for Secondary Teachers.

Prerequisites and co-requisites:

None.

#### Recommended optional programme components:

Other courses in the Pedagogical Studies for Teachers.

**Recommended or required reading:** 

To be agreed on at the start of the course.

#### Assessment methods and criteria:

Attendance in teaching and independent work.

## Grading:

Pass/fail

Person responsible:

Oulu Teacher Training School

#### Working life cooperation:

## 050084A: Applied teaching practice, 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 cr

## Language of instruction:

Finnish

Timing:

Jan 9 - May 30 Lectures: Special Education: Feb 13 at 14.30 - 15.45, Feb 16 at 13 - 15.45; Basics of Educational Administration: Feb 21, 22, 27, 28, Mar 1 at 14.30 - 15.45 and Feb 24 at 8.15 - 9.30

## Learning outcomes:

Having completed the course, the student

- is familiar with the opportunities provided by broadly based teacher education to work in the different sectors of education
- understands the contents of some special function in education. These include, among other things, special education and educational administration.

## Contents:

Applied Teaching Practice comprises the following courses:

- 1. Special Education and Institutions of Special Education, 1 credit
- 2. Basics of Educational Administration, 1 credit. See 416004A and 4160012A (Education Programme).

## Mode of delivery:

Face-to-face teaching

## Learning activities and teaching methods:

Contact teaching 20 h, independent work 34 h

Target group:

Students pursuing Pedagogical Studies for Secondary Teachers.

Prerequisites and co-requisites:

None.

Recommended optional programme components:

Other courses in the Pedagogical Studies for Teachers.

Recommended or required reading:

To be announced at the start of the course.

Assessment methods and criteria:

Attendance in teaching and independent work.

Grading: Pass/fail

## Person responsible:

Oulu Teacher Training School

Working life cooperation:

Yes. Teaching practice.

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

Voimassaolo: 01.08.2005 -Opiskelumuoto: Basic Studies

Opiskeiumuoto: Basic St

Laji: Course

Vastuuyksikkö: Faculty of Education

Arvostelu: 1 - 5, pass, fail

Opintokohteen oppimateriaali:

Rinne, Risto (1), , 2004, pakollinen

Lisätiedot: **Rinne, Risto**, , 2000, pakollinen Lisätiedot: **Siljander, Pauli**, , 2002, pakollinen Lisätiedot:

#### Opintokohteen kielet: Finnish

## Leikkaavuudet:

ay410067P Basic course in education (OPEN UNI) 4.0 op

## **ECTS Credits:**

4 credits Language of instruction: Finnish Timing: 1st year Learning outcomes:

After completion of the course, the student

- identifies the most important features of education as a science
- has a basic understanding of the history of education and its main areas of study.
- knows how to use the basic concepts of education and pedagogy and is familair with issues connected with them
- can relate different sectors of the educational sciences to each other
- is familiar with practical and professional tasks in the field of of education and with issues connected to them.

## **Contents:**

- education as a science, main areas and subareas
- basic concepts: development, bildung, teaching, pedagogical activity
- history and development of education in Finland
- basics of professional growth and development
- orientation to practical tasks in education, assumption of a professional identity as a teacher and in other educational tasks.

## Mode of delivery:

#### Face-to-face teaching

#### Learning activities and teaching methods:

Lectures and other contact teaching 18 h, independent work

## Target group:

Students in all programmes pursuing basic studies in education

#### Prerequisites and co-requisites:

None

#### **Recommended optional programme components:**

This is the first course in the Basic Studies in Education (25 cr).

#### Recommended or required reading:

Rinne, R., Kivirauma, J. & Lehtinen, E. (toim.) (2000) Johdatus kasvatustieteisiin. Siljander, P. (2002) Systemaattinen johdatus kasvatustieteeseen.

Availability can be checked here.

## Assessment methods and criteria:

Lecture or literature exam, or written assignments

Grading:

pass/fail

#### Person responsible:

Pauli Siljander

## Subject teacher education: Katri Jokikokko

Working life cooperation:

None

## 050081A: Basic teaching practice, 5 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Intermediate Studies Laji: Practical training

#### **ECTS Credits:**

3 cr

Language of instruction: Finnish Timing:

Autumn term

## Learning outcomes:

Having completed the course, the student

- knows how to apply the curriculum to plan his/her teaching
- knows how to plan the implementation and evaluation of teaching
- knows how to apply the knowledge s/he has learnt to face different people and keep in control of teaching situations

#### **Contents:**

The student works on her/his capacity to make educational curricula and to plan, execute and assess teaching work. S/he becomes capable of dealing with different kinds of students as well as varying teaching and learning situations.

Content areas:

- curriculum design in the student's own subject
- planning, execution and assessment of teaching
- teaching methods and materials
- knowing the student
- development of interaction skills
- Teacher Training School didactics and special features of student's own subject
- observation and analysis of teaching
- individual and group tutoring
- ICT basics

#### Mode of delivery:

Face-to-face teaching

## Learning activities and teaching methods:

Contact teaching 30 h, independent work 50 h

#### Target group:

Students pursuing Pedagogical Studies for Secondary Teachers

Prerequisites and co-requisites:

No

Recommended optional programme components:

Other courses in the module of Pedagogical Studies for Secondary Teachers.

Recommended or required reading:

See Pedagogical Seminar I.

Assessment methods and criteria:

Attendance in teaching and independent work.

Grading:

Pass/fail

## Person responsible:

Oulu Teacher Training School **Working life cooperation:** 

Yes

## 410068P: Didactics, 4 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Basic Studies Laji: Course Vastuuyksikkö: Faculty of Education Arvostelu: 1 - 5, pass, fail Opintokohteen oppimateriaali: Hakkarainen, Kai , , 1999, pakollinen Lisätiedot:

Kansanen, Pertti , , 2004, pakollinen

Lisätiedot:

Rauste-von Wright, Maijaliisa , , 2003, pakollinen Lisätiedot:

Rauste-von Wright, Maijaliisa , , 1994, pakollinen

Lisätiedot:

Uusikylä, Kari , , 2005, pakollinen

Lisätiedot: **Uusikylä, Kari** , , 2000, pakollinen

Lisätiedot:

## Opintokohteen kielet: Finnish

## Leikkaavuudet:

ay410068P Didactics: (OPEN UNI) 4.0 op

ECTS Credits: 4 credits Language of instruction: Finnish Timing: 1st year

Learning outcomes:

Having completed the course, the students

- understand the basic concepts of learning and teaching, their theoretical foundations and their meaning in practice
- know how to describe the learning process and its cognitive, motivational and social features.
- recognize the teacher's role as a director/guide of learning and are familiar with new teaching models
- are able to analyse the characteristics of a good learner in theory and practice and are aware of how learning skills can be taught.

#### Contents:

- basic concepts of learning and teaching, their theoretical foundations and significance in practice
- basic processes of learning: learning process and its cognitive, motivational and social features
- theoretical foundations of learning gudiance: the teacher's role as a director of learning and teaching models
- principles of curriculum 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

## Mode of delivery:

Face-to-face teaching

## Learning activities and teaching methods:

Lectures and other contact teaching 18 h, independent work

Target group:

Students in all programmes pursuing basic studies in education

## Prerequisites and co-requisites:

None

## Recommended optional programme components:

The course is part of the Basic Studies in Education (25 cr).

## Recommended or required reading:

Applicable parts:

Hakkarainen, K., Lonka, K. & Lipponen, L. (2004) Tutkiva oppiminen. järki, tunteet ja kulttuuri oppimisen sytyttäjinä. (vuoden 2001 painos käy myös)

Rauste-von Wright, M. & von Wright, J. (1994 - 2002) Oppiminen ja koulutus (1.- 8. p.).

Uusikylä, K. & Atjonen, P. (2005) Didaktiikan perusteet.

Course material availability can be checked here.

## Assessment methods and criteria:

Lecture and literature exam or written assignments

Grading:

## pass/fail

Person responsible:

Sanna Järvelä

## Working life cooperation:

None

## 410071P: Educational philosophy, 4 op

Voimassaolo: 01.08.2005 -

Opiskelumuoto: Basic Studies

Laji: Course

Vastuuyksikkö: Faculty of Education

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

## Leikkaavuudet:

ay410071P Educational philosophy: (OPEN UNI) 4.0 op

## **ECTS Credits:**

4 cr

Language of instruction: Finnish Timing: 1st year

## Learning outcomes:

Having completed the course, the student

- is familiar with the main areas of research in educational philosophy, educational issues emerging from them, educational philosophical research and its results.
- knows how to analyse and solve ethical and philosophical problems in education and teaching and is able to critically assess previously suggested solutions.

## **Contents:**

- research of educational philosophy as an area of education, nature of philosophy as a science, philosophical questions and the most importan areas of philosophy.
- objectives in education
- historically important trends in academic study of educational philosophy
- the ethical nature of education and teaching, ethical issues in pedagogical activity

## Mode of delivery:

Face-to-face teaching

## Learning activities and teaching methods:

Lectures and other contact teaching 18 h, independent work.

## Target group:

Students in all programmes pursuing basic studies in education.

Prerequisites and co-requisites:

None

Recommended optional programme components:

The course is part of the Basic Studies in Education (25 cr).

#### **Recommended or required reading:**

Applicable parts:

Ojakangas, M. (2001) Pietas - Kasvatuksen mahdollisuus.

Puolimatka, T. (1995) Kasvatus ja filosofia.

Etiikka koulun arjessa. (2002)

Atjonen, P. (2004) Pedagoginen etiikka koulukasvatuksen karttana ja kompassina.

Wulf, C. (2002) Anthropology of education.

Course material availability can be checked <u>here</u>. **Assessment methods and criteria:** Lecture and literature exam or written assignments. **Grading:** pass/fail **Person responsible:** Eetu Pikkarainen **Working life cooperation:** 

## None

#### Other information:

For early childhood education students, the scope of is course is 3 credits; in addition to the lectures, they will complete "Early Childhood Education - theoretical approaches", 2 credits of exercises.

## 410069P: Educational psychology, 4 op

## Voimassaolo: 01.08.2005 -

**Opiskelumuoto:** Basic Studies

Laji: Course

Vastuuyksikkö: Faculty of Education

Arvostelu: 1 - 5, pass, fail

#### Opintokohteen kielet: Finnish

## Leikkaavuudet:

ay410069P Educational psychology: (OPEN UNI) 4.0 op

ECTS Credits: 4 cr Language of instruction: Finnish Timing: 1st year Learning outcomes: Having completed the course, the stu-

Having completed the course, the student

- knows how to use the central concepts of educational psychology and identifies its research areas and main research objects
- understands the special nature of educational psychology and can estimate the opportunities and limitations in applying psychological knowledge in educational work

**Contents:** 

- the relationship of educational psychology to psychology and other areas of education
- research object and basic concepts of educational psychology: growth, development, learning
- professional practice in educational psychology and its application to issues of growth and development

## Mode of delivery:

Face-to-face teaching

#### Learning activities and teaching methods:

Lectures and other teaching 18 h, independent work

Target group:

Students in all programmes pursuing basic studies in education

Prerequisites and co-requisites:

No

## Recommended optional programme components:

The course is part of the Basic Studies in Education (25 cr).

## **Recommended or required reading:**

Applicable parts:

Dunderfelt, T. (1992-2006) Elämänkaaripsykologia.

Lehtinen, E., Kuusinen, J. & Vauras, M. (2007) Kasvatuspsykologia OR

Lehtinen, E. & Kuusinen, J. (2001). Kasvatuspsykologia.

Vuorinen, R. (1990-2000). Persoonallisuus ja minuus.

Course material availability can be checked here.

## Assessment methods and criteria:

Lecture and literature exam or written assignments

Grading:

pass/fail

Person responsible:

Hannu Soini

Working life cooperation:

None

## Other information:

In the early childhood education programme, this course is 2 cr in scope (lectures only).

## 410017Y: Multimedia as a learning project, 2 op

Voimassaolo: 01.08.2005 -

Opiskelumuoto: General Studies

Laji: Course

Vastuuyksikkö: 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:

After completing the course the student:

- recognises the basic concepts of multimedia
- has planned and implemented an educationally relevant multimedia product in a group
- knows how to use commonly available multimedia production software
- discovers opportunities to use multimedia in education

## Contents:

- basic concepts in multimedia
- digital audio processing
- digital image processing
- digital video processing
- digistories

## Mode of delivery:

Face-to-face teaching Learning activities and teaching methods: Lectures 10 h, small-group sessions 20 h, independent study Target group: All the students in the faculty Prerequisites and co-requisites: None Recommended optional programme components: None Recommended or required reading:

Lectures, groupwork. Study materials will be confirmed at the beginning of the course.

## Assessment methods and criteria:

Active participation in the course. A multimedia product.

Grading: Pass/fail Person responsible: Asko Pekkarinen Working life cooperation: None

## 416012A: Optional cource: basics of educational administration, 1 op

Voimassaolo: 01.08.2006 - 31.07.2013 Opiskelumuoto: Intermediate Studies Laji: Course Vastuuyksikkö: Faculty of Education Arvostelu: 1 - 5, pass, fail

**ECTS Credits:** 1 credit Language of instruction: Finnish Timing: 4th to 5th year Learning outcomes: Upon completion of the study module, the student knows the acts and decrees governing educational administration as well as their contents • know hows to apply educational administration legislation into practice at her/his own level of education knows how to use the Finlex software. **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. Mode of delivery: Face-to-face teaching Learning activities and teaching methods: Small-group sessions and practical assignment 4 h. Prerequisites and co-requisites: None Recommended optional programme components: This is a part of the compulsory course 416004A "Basics of Educational Administration". **Recommended or required reading:** To be announced at the start of the course Assessment methods and criteria: Assignment Grading: pass/fail Person responsible: N.N. Working life cooperation: None

## 050091A: Optional studies, 3 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: 3 cr Language of instruction: Finnish Timing: Spring term Learning outcomes: Upon completion of the course, the student is able to describe the essential contents of his/her chosen course and is capable of applying it as a teacher. Contents: Courses supporting the general objectives of Badagaging! Studies for Teachers, offered by the Teacher Training

Courses supporting the general objectives of Pedagogical Studies for Teachers, offered by the Teacher Training School, Education Programme and Subject Didactics. Courses are confirmed on a yearly basis.

Learning activities and teaching methods: Lectures and other contact teaching as well as independent work, totalling 80 h Target group: Students in secondary teacher education programmes Prerequisites and co-requisites: No Recommended optional programme components: The course is a part of the Pedagogical Studies for Secondary Teachers Recommended or required reading: Vary depending on the student's choice. Assessment methods and criteria: To be agreed on at the start of the course. Grading: Pass/fail Person responsible: Eetu Pikkarainen Working life cooperation: None

## 407028A: Pedagogical Seminar II, 3 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: Students are:

- familiar with the research field of school pedagogy 3-5
- familiar with different models of learning 3-5
- able to identify the theoretical principles of learning behind different pedagogical models 3-5
- able to design study periods based on different pedagogical starting points 3-5
- able to make use of ICT as a pedagogical tool.
  - (Intended assessment criteria for a successful pass are max 25 pts)

## Pedagogical studies for secondary teachers

The students

- are familiar with the research field of school pedagogy
- gain perspective into the issues underlying changing teacherhood
- are able to envision their teacherhood and work as teacher through theoretical and practical dialogue.
- understand their own teacherhood and the ethical dimension of teaching

Contents:

- learning theory
- individual and group learning
- guidance of learning
- assessment

## Pedagogical studies for secondary teachers

- deepen knowledge of the content areas covered in Pedagogical Seminar I
- research orientation

Mode of delivery:

#### Face-to-face teaching Learning activities and teaching methods:

Small group sessons 24 h, independent work 16 h, literature study 20 h, plan/report 20 h

## Target group:

Primary teacher students (broadly based) and students pursuing the Pedagogical Studies for Teachers **Prerequisites and co-requisites:** 

410074P Pedagogical Seminar I

## Recommended optional programme components:

The seminar is a part of the umbrella course formed by the "Guidance of learning, planning and evaluation of teaching" course and practical school experience at the Bachelor level. It looks at the theoretical starting points of designing different teaching and learning models and learning environments in practice. Designing practices based on substantiated learning theories aims to help support the students' learning processes in their teaching practice.

## Recommended or required reading:

To be agreed on at the beginning of the course

## Assessment methods and criteria:

Active participation in contact teaching. Design, implementation, evaluation and reporting on a pedagogical application derived from learning theory.

In the **Pedagogical studies for teachers** the methods of implementation are the same as in Pedagogical Seminar II and III.

## Grading:

Pass/fail, a mark of 3 required to secure a pass

## Person responsible:

Sinikka Kaartinen (primary teacher education)

Marko Kielinen and Sinikka Kaartinen (pedagogical studies for teachers)

## Working life cooperation:

None

## 410074P: Pedagogical seminar I, 3 op

Voimassaolo: 01.08.2005 -

**Opiskelumuoto:** Basic Studies

Laji: Course

Vastuuyksikkö: Faculty of Education

Arvostelu: 1 - 5, pass, fail

Opintokohteen oppimateriaali: Gulliford, Ronald & Upton, Graham (eds.), , 1992 Corbett, Jenny , , 2001 Charlton, Tony & David, Kenneth (eds.), , 1990 Opintokohteen kielet: Finnish

ECTS Credits: 3 credits Language of instruction: Finnish Timing: 1st year Learning outcomes: Completion of Dedeseried C

Completion of Pedagogical Seminar I and final report. Intended learning outcomes and the assessment criteria for a successful pass are (max 25 pts):

Thre student:

- knows how to gather observation data on social interaction in the classroom (3-5 pts)
- identifies issues underlying changing teachership (3-5 pts)
- knows how to apply awareness of the pupil in the teacher's pedagogical activity (3-5 pts)
- knows how to present her/his pedagogical theory-in-use (3-5 pts)
- knows how to prepare a report based on observation data in the classroom, in which s/he discusses her/his observations from theoretical and practical points of view (3-5 pts)

## Subject teacher education

Having completed the course, the student knows how to

- evaluate the relationship between general studies in educational sciences and other content areas in pedagogical studies and with the experiences acquired in teaching practice (relationship between theory and practice).
- participate in pedagogical discussion with representatives of different subjects and other parties
- justify his/her own pedagogical action
- face different students and identify special education needs and participate in student care.
- understand the principles of inclusive teaching and the individual education plan (IEP) **Contents:** 
  - educational and developmental psychology: developmental features in the growth of school-aged learners
  - theories in social psychology and their applications in educational observation in the classroom
  - observation data
  - pedagogical portfolio: objectives and implementation

## Mode of delivery:

Face-to-face teaching

## Learning activities and teaching methods:

Small-group sessions 24 h, independent work 16 h, literature study 20 h, report 20 h

#### Target group:

Students pursuing Pedagogical Studies (primary teacher education and subject teacher education) **Prerequisites and co-requisites:** 

410067P Basic Course in Education, 4 credits, 410068P Didactics, 4 credits

## Recommended optional programme components:

The seminar is a part of the umbrella course formed by the "Developmental Psychology" and "School Experience Orientation" course modules. It focuses on learner development and growth as well as class interaction and the study of sociocultural phenomena.

## Recommended or required reading:

To be agreed on at the beginning of the course

## Assessment methods and criteria:

Active participation in contact teaching. Report on a selected topic (pass/fail, a mark of 3 required to secure a pass).

## **Grading:** Pass/fail

Person responsible:

Sinikka Kaartinen (Primary Teacher Education)

Marko Kielinen and Sinikka Kaartinen (Pedagogical Studies for Teachers)

## Working life cooperation:

## None

Other information:

The course is different in content and implementation in the **Pedagogical Studies for Teachers**. See http://wwwedu.oulu.fi/intra/?oid=59363 for more information.

## 050073A-05: SD III Biology and Geography, 2 op

Voimassaolo: 01.08.2007 -Opiskelumuoto: Intermediate Studies Laji: Partial credit Vastuuyksikkö: Faculty of Education Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

#### ECTS Credits: 2 cr Language of instruction: Finnish Timing: 4th year Learning outcomes: Student is able to • develop student centred teaching and learning processes

- compare worldviews and their relation to Biology and Geography education
- analyze his/her own professional growth as a Biology and Geography teacher and to evaluate his/her readiness to support studying and learning processes of a student and groups.

## Contents:

- A student as a learner and support of learning
- Worldviews and Biology and Geography education
- Professional growth as a Biology and Geography teacher

## Mode of delivery:

Blended teaching

## Learning activities and teaching methods:

Lecture and small-group work 16 h, distant work 38 h **Target group:** 

Biology and Geography student teachers **Prerequisites and co-requisites:** 

## Recommended optional programme components:

Subject studies in Biology and Geography, SD I, SD II

## Recommended or required reading:

Eloranta, V., Jeronen, E. & Palmberg, I. (toim.) (2005) Biologia eläväksi. Biologian didaktiikka. PS-kustannus. Cantell, H., Rikkinen, H. & Tani, S. (2007) Maailma minussa - minä maailmassa. Maantieteen opettajan käsikirja. Studia Paedagogica 33. Helsingin yliopisto, Soveltavan kasvatustieteen laitos.

Course material availability can be checked here.

## Assessment methods and criteria:

Active participation in the lectures, study diary, exam.

Grading: 0 - 5 Person responsible: Eila Jeronen Working life cooperation: No

## 050073A-01: SD III Finnish Language and Literature, 2 op

Voimassaolo: 01.08.2007 -Opiskelumuoto: Intermediate Studies Laji: Partial credit Vastuuyksikkö: Faculty of Education Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

#### ECTS Credits: 2 cr Language of instruction: Finnish Timing: 4th year Learning outcomes: The student

- is familiar with different school systems and knows how to make varied use of the working methods of Finnish and literature teaching in them
- also familiarises her/himself with drama education and knows how to plan a study module making use of working methods in small-scale drama
- deepens her/his conceptions of folk tradition as an area of Finnish and literature teaching
- · develops her/his abilities to assessment pupils' learning

## Contents:

Finnish and literature teaching in vocational institutions, drama education, folk tradition

Mode of delivery:

## Face-to-face teaching

Learning activities and teaching methods:

Lectures and small-group work 16 h. An independent assignment 38 h.

Target group:

Mother tongue (Finnish) and literature teacher students **Prerequisites and co-requisites:** Subject Didactics I and II **Recommended optional programme components:** Studies in mother tongue (Finnish) and literature, other Pedagogical Studies for Secondary Teachers **Recommended or required reading:** To be agreed on at the start of the course. **Assessment methods and criteria:** Active participation in contact teaching, independent written assignment. **Grading:** Pass/fail **Person responsible:** Minna Sääskilahti **Working life cooperation:** None

## 050073A-03: SD III Foreign Languages, 2 op

Voimassaolo: 01.08.2007 -Opiskelumuoto: Intermediate Studies Laji: Partial credit Vastuuyksikkö: Faculty of Education Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

**ECTS Credits:** 2 cr Language of instruction: Finnish Timing: 4th year Learning outcomes: The student learns to plan, execute and assess written and oral assignments. **Contents:** The following topics are covered: • oral language skills - teaching and assessment various oral presentations Mode of delivery: Face-to-face teaching Learning activities and teaching methods: Lectures, small-group sessions, independent study Target group: Foreign language teacher students Prerequisites and co-requisites: Subject didactics I and II Recommended optional programme components: The course is part of the Pedagogical Studies for Secondary Teachers. **Recommended or required reading:** Mäkinen, K. (2002) Uskalla kokeilla! Oulu: Oulun yliopistopaino. Course material availability can be checked here. Assessment methods and criteria: Designing and implementing a subject-specific process-drama Grading: Pass/fail Person responsible: Lecturer in Foreign Language Education Working life cooperation: No

Voimassaolo: 01.08.2007 -Opiskelumuoto: Intermediate Studies Laji: Partial credit Vastuuyksikkö: Faculty of Education Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

**ECTS Credits:** 2 cr Language of instruction: Finnish Timina: 4th year Learning outcomes: The student understands the significance of local history for the learner's growth and historical thinking. knows how to apply local history as part of teaching in accordance with the curriculum. • knows how to plan and implement teaching visits. knows how to compose and mark tests. **Contents:** Teaching and evaluation of local history as a means to fulfil the curriculum. Mode of delivery: Blended teaching Learning activities and teaching methods: Lectures and exercises 16 h, distance work 38 h Target group: History teacher students Prerequisites and co-requisites: SD I and II Recommended optional programme components: Pedagogical Studies for Secondary Teachers **Recommended or required reading:** To be agreed on at the start of the course Assessment methods and criteria: Active participation in contact teaching and independent tasks Grading: Pass/fail Person responsible: Jari Honkanen Working life cooperation: No

## 050073A-04: SD III Mathematics and Natural Sciences, 2 op

Voimassaolo: 01.08.2007 -Opiskelumuoto: Intermediate Studies Laji: Partial credit Vastuuyksikkö: Faculty of Education Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 2 cr Language of instruction: Finnish Timing: 3th year, srping term Learning outcomes: Having completed the course, the student

- knows how to apply the subject-specific and didactic content knowledge needed in the teaching mathemstics and sciences in primary and secondary education
- knows how to evaluate differentiation and integration of teaching and put various differentiation and integration methods into practice
- knows how to analyse the transition phase from a school level to another especially from the viewpoint of mathematics and sciences
- knows how to choose and justify the use of different teaching methods in mathematics and science teaching

The students gain a deeper level of understanding and expand their knowledge of primary and secondary maths and natural sciences in terms of teaching content and subject didactics. The students further develop their knowledge and conceptual tools relating to different content areas in Maths, Chemistry and Physics. This is done in a way which incorporates the student experience so that teaching and learning become a pleasant experience. The student teachers assume a critically informed mindset for teaching Maths and Social Sciences - its objectives, content, teaching methods and educational material. The students learn to appreciate mathematical subjects and their teaching and learning on a deeper level.

## Contents:

- Differentiation and integration of teaching in mathematics and sciences
- Phases of transition from one school level to another from the viewpoint of mathematics and sciences
- Examples of teaching and learning contents in mathematics and sciences

## Mode of delivery:

## Face-to-face teaching

## Learning activities and teaching methods:

Lectures 4 g, exercises 18 h (two exercise groups are selected based on the student's interests from among mathematics, physics and chemistry). Independent work 32 h.

## Target group:

Mathematics and science teacher students

Prerequisites and co-requisites:

## Subject Didactics I ja II

## Recommended optional programme components:

Subject Didactics I, II and IV

Teh course is part of the Pedagogical Studies for Secondary Teachers, Mathematics and Science **Recommended or required reading:** 

## To be agreed on at the start of the course

Assessment methods and criteria:

Participation in exercise groups, group exam.

Grading:

Pass/fail

## Person responsible:

Vesa-Matti Sarenius, Emilia Manninen and Kaisa Hautala

Working life cooperation:

None

## 050073A-06: SD III Music Education, 2 op

Voimassaolo: 01.08.2007 -Opiskelumuoto: Intermediate Studies Laji: Partial credit Vastuuyksikkö: Faculty of Education Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 2 cr Language of instruction: Finnish Timing: 4th year Learning outcomes: The student is able to perceive the music teacher's activities as an artistic and cultural actor in school communities, and knows how to plan events involving various target groups making use of the working methods and learning environments in music education.

## Contents:

- National and municipal curricula at the primary level.
- In conjunction with Advanced Practice I (6 credits) and Pedagogical Seminar II.

Mode of delivery:

Face-to-face teaching Learning activities and teaching methods: Lectures 20 h, independent assignment to be agreed on during the course Target group: Music education students Prerequisites and co-requisites: Subject Didactics I (050071A) and II (050072A) Recommended optional programme components: In conjunction with Advanced Practice I (6 credits) and Pedagogical Seminar II **Recommended or required reading:** Recent teaching materials in music education, core curriculum Assessment methods and criteria: Assignments connected with the course Grading: Pass/fail Person responsible: Kari Kuivamäki Working life cooperation: None

## 050074A-05: SD IV Biology and Geography, 5 op

Voimassaolo: 01.08.2007 -Opiskelumuoto: Intermediate Studies Laji: Partial credit Vastuuyksikkö: Faculty of Education Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 5 cr Language of instruction: Finnish Timing: 4th year Learning outcomes: Student is able to • interpret research reports and articles in Biology and Geography education • plan and carry through a study in Biology and Geography education • evaluate research reports of his/her own and other authors constructively

• desribe what the concept ethical responsibility means.

**Contents:** 

- Principles and practices in the research of Biology and Geography education
- Designing and delivering of a research in Biology or Georaphy education

Mode of delivery:

Blended teaching

#### Learning activities and teaching methods:

Lectures and seminar work 36 h, distant work 98 h

Target group:

Biology and Geography student teachers

## Prerequisites and co-requisites:

SD I, II, III

## Recommended optional programme components:

Subject studies in Biology and Geography, SD I, SD II, SD III

Recommended or required reading: Study material will be agreed separately with the teacher responsible for the course. Assessment methods and criteria: Active participation in the lectures and seminars, research report, study diary, portfolio Grading: 0 - 5 Person responsible: Eila Jeronen Working life cooperation: No

## 050074A-01: SD IV Finnish Language and Literature, 5 op

Voimassaolo: 01.08.2007 -Opiskelumuoto: Intermediate Studies Laji: Partial credit Vastuuyksikkö: Faculty of Education Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits: 5 cr Language of instruction: Finnish Timing: 4th year Learning outcomes:

After completion, the students

- will be able to develop their professional identities through research work.
- can apply subject didactics research approaches in developing teaching methods in Finnish Language and Literature.
- are capable of reforming mother tongue and literature teaching on a broader scale.

## Contents:

The following topics are covered:

- principles and practice in subject didactics research
- research paper

Mode of delivery:

Face-to-face teaching

Learning activities and teaching methods:

Seminar work 36 h, independent study 98 h

## Target group:

Mother tongue ands literature teacher students

Prerequisites and co-requisites:

Subject didactics I, II and III

Recommended optional programme components:

Subject Studies in Mother tongue ands literature, Pedagogical Studies for Secondary Teachers **Recommended or required reading:** 

TBC

Assessment methods and criteria:

Participation in seminar work, independent research paper. Grading: Pass/fail Person responsible:

Minna Sääskilahti Working life cooperation: No

INO

## 050074A-03: SD IV Foreign Languages, 5 op

Voimassaolo: 01.08.2007 -

**Opiskelumuoto:** Intermediate Studies Laji: Partial credit Vastuuyksikkö: 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 students

- are able to prepare a subject didactics research paper based on in-depth study of one particular subsector in foreign language teaching.
- understand the ethical responsibilities in teaching work.
- assess their own teaching philosophy and growth as a teacher as a part of the professional development.

#### **Contents:**

The following topics are covered:

- in-depth study of a subarea in foreign language teaching
- development of research abilities and capacity
- developing skills in a particular subarea of foreign languages teaching and learning

#### Mode of delivery:

Face-to-face teaching

Learning activities and teaching methods: 4 h lectures, 42 h seminar work in small groups. Target group: Foreign language teacher students Prerequisites and co-requisites: Subject didactics I, II and III Recommended optional programme components: Pedagogical studies for secondary teachers **Recommended or required reading:** To be agreed on at the start of the course. Assessment methods and criteria: Active participation in seminar sessions, research paper. Grading: 0 - 5 Person responsible: Lecturer in Foreign Language Education Working life cooperation: No

## 050074A-02: SD IV History, 5 op

Voimassaolo: 01.08.2007 -**Opiskelumuoto:** Intermediate Studies Laji: Partial credit Vastuuyksikkö: Faculty of Education Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

**ECTS Credits:** 5 cr Language of instruction: Finnish Timing: 4th year

## Learning outcomes:

After completion of the course, the student

- understands the underlying social and didactic background factors rfelated to the generation of learning materials.
- understands the learning process and knows how to produce learning materials to support different learning strategies.
- knows how to analyse critically learning processes and evaluate learning materials.

• knows how to write a thesis independently or create a set of learning materials on an agreed topic.

## Contents:

Production of an applied or theoretical seminar paper on subject didactics, its assessment in a seminar session. **Mode of delivery:** 

Blended teaching

Learning activities and teaching methods: Seminar sessions 36 h, distance work 98 h Target group: History teacher students Prerequisites and co-requisites: Completion of Subject Didactics I, II and III Recommended optional programme components: The course is a part of the Pedagogical Studies for Secondary Teachers **Recommended or required reading:** To be agreed on at the start of the course Assessment methods and criteria: Production of and acting as a peer opponent to a seminar paper, active participation in seminar sessions. Grading: Pass/fail Person responsible: Jari Honkanen Working life cooperation: None

## 050074A-04: SD IV Mathematics and Natural Sciences, 5 op

Voimassaolo: 01.08.2007 -Opiskelumuoto: Intermediate Studies Laji: Partial credit Vastuuyksikkö: 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 appreciates the basic principles of doing subject didactics research: theory, empiria, research problems, methods, conclusions.
- The student learns about the most recent ideas and research findings related to teaching mathematical subjects.
- The students are able to develop their approach and 'literacy' towards subject didactics: the ability to read, interpret, and produce research of their own.
- The students learn formative criticism and debating skills in the context of subject didactics: the ability to critically examine conducted studies as well as their own research.

## Contents:

Principles and practice of subject didactics research. Research paper and evaluation.

Mode of delivery:

Face-to-face teaching

Learning activities and teaching methods:

Lectures 4 h, small-group work 30 h

Target group: Mathematics and Science teacher students Prerequisites and co-requisites: Subject didactics I, II and III Recommended optional programme components: Subject didactics I, II and III Pedagogical studies for secondary teachers **Recommended or required reading:** To be agreed on at the start of the course. Assessment methods and criteria: Seminar thesis Grading: Pass/fail Person responsible: Vesa-Matti Sarenius, Emilia Manninen and Kaisa Hautala Working life cooperation: No

## 050074A-06: SD IV Music Education, 5 op

Voimassaolo: 01.08.2007 -Opiskelumuoto: Intermediate Studies Laji: Partial credit Vastuuyksikkö: Faculty of Education Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

## **ECTS Credits:**

5 cr Language of instruction: Finnish Timing: Master's level Learning outcomes: The student identifies didactic issues and know how to reflect on her/his work using current literature from the viewpoint of the so-called inquiring teacher.

## **Contents:**

Familiarisation with research data and literature on music education from the viewpoint of the inquiring teacher **Mode of delivery:** Face-to-face teaching **Learning activities and teaching methods:** Lectures 20 h **Target group:** Music education students **Prerequisites and co-requisites:** Subject Didactics I, II and III **Recommended optional programme components:** Linked to the thesis seminar

Recommended or required reading: Dissertations and articles connected with music learning and teaching and the profession of music teachers, other current ligterature on subject didactics Assessment methods and criteria: Assignments connected with the course Grading: 0 - 5 Person responsible: Kari Kuivamäki Working life cooperation: None

## 410070P: Sociology of education, 4 op

## Voimassaolo: 01.08.2005 -

Opiskelumuoto: Basic Studies

Laji: Course

Vastuuyksikkö: Faculty of Education

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

## Leikkaavuudet:

ay410070P Sociology of education:Society, educational institutions and social interaction (OPEN UNI) 4.0 op

## **ECTS Credits:**

4 credits Language of instruction: Finnish Timing: 1st year

## Learning outcomes:

Having completed the course, the student is able to perceive:

- the links between sociology of education, sociology and education.
- basic issues and concepts in social sciences and sociology of education
- the Finnish education system and educational policy as a part of social policy

## Contents:

- central concepts in social sciences
- basic concepts and issues in sociology of education
- sociology of education: links to education and sociology
- socialization and the functions of education
- classic trends in the sociology of education: structuralism, conflict theory and critical sociology, socialization theory and interactionism
- the Finnish education system: past, present and future perspectives
- education policy as a part of social policy
- theoretical and practical issues in sociology of education: school practices (interactionist classroom research), hidden curriculum, equality of education, identity, normality and deviation.

## Mode of delivery:

Face-to-face teaching

## Learning activities and teaching methods:

Lectures and other contact teaching 18 h, independent work.

Target group:

Students in all programmes pursuing basic studies in education.

## Prerequisites and co-requisites:

No

## Recommended optional programme components:

The course is part of the Basic Studies in Education (25 cr).

## Recommended or required reading:

Aittola, T. (toim.) (1999) Kasvatussosiologian teoreetikoita. Uudesta kasvatussosiologiasta oppimisen kriittiseen tarkasteluun.

Antikainen, A., Rinne, R. & Koski, L. (2000) Kasvatussosiologia.

## Course material availability can be checked here.

## Assessment methods and criteria:

Exam and literature exam or written assignments.

Grading:

pass/fail

Person responsible:

Veli-Matti Ulvinen

Working life cooperation:

None

Other information:

In the early childhood education programme, this course consists of two parts, 01 (Sociology of education, 3 credits and exercises) and 02 (Child, education and culture, 2 credits). Students can find more information on coursework and reading materials in the relevant section of the course guide.

## 050073A: Subject didactics III, 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 cr Language of instruction: Finnish Timina: 4th vear Learning outcomes: See the subcodes for the learning outcomes in the various subjects. **Contents:** The objectives, content, implementation, target group, etc., depend on the subject group in question. More specific information can be found in the following course descriptions: 050073A-01 Finnish Language and Literature • 050073A-02 History • 050073A-03 Foreign Languages • 050073A-04 Mathematics and Natural Sciences 050073A-05 Biology and Geography 050073A-06 Music Education Mode of delivery: Face-to-face teaching/ blended teaching Learning activities and teaching methods: See the subcodes. Target group: Secondary teacher students in the relevant subjects Prerequisites and co-requisites: See the subcodes. Recommended optional programme components: The course is part of the Pedagogical Studies for Secondary Teachers. **Recommended or required reading:** See the subcodes. Assessment methods and criteria: See the subcodes. Grading: See the subcodes. Person responsible: Varies by subject. Working life cooperation: None

## 050074A: Subject didactics IV, 5 op

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

**ECTS Credits:** 5 cr Language of instruction: Finnish Timing: 4th year Learning outcomes: See the subcodes for the learning outcomes in the various subjects. **Contents:** The contents vary by subject groups. See: • 050074A-01 Finnish Language and Literature • 050074A-02 History 050074A-03 Foreign Languages 050074A-04 Mathematics and Natural Sciences • 050074A-05 Biology and Geography 050074A-06 Music Education Mode of delivery: Face-to-face teaching/ blended teaching Learning activities and teaching methods: See the subcodes. Target group: Secondary teacher students in the relevant subjects. Prerequisites and co-requisites: See the subcodes. Recommended optional programme components: The course is part of the Pedagogical Studies for Secondary Teachers. **Recommended or required reading:** See the subcodes. Assessment methods and criteria: See the subcodes. Grading: See the subcodes. Person responsible: Varies by the subject. Working life cooperation: None