# Opasraportti

## KTK - Edutool Master's Degree Programme 2009-2011 (2009 - 2011)

## Tutkintorakenteisiin kuulumattomat opintokokonaisuudet ja -jaksot

413307S: Cognitive, Motivational and Emotional Base for Learning for Understanding, 6 op
413310S: Design Based Research as a Research Method, 5 op
413309S: Expertise and Social Innovations, 8 op
413027S: Final Examination, 4 op
410027Y: Learning Communities and Distributed Expertise, 5 op
410026Y: Learning Environments and Communication, 5 op
413308S: Learning and Collaboration in Technology-Enchanted Contexts, 6 op
413306S: Pedagogical Design and Use of Technology in Educational Systems, 5 op
410028Y: Planning and Management of Teaching and Educational Projects, 5 op
413008S: Thesis studies, 35 op
413005S-05: a) Advanced Course in Quantitative Research Methods, 5 op
413005S-06: b) Advanced Course in Qualitative Research Methods, 5 op

# Opintojaksojen kuvaukset

## Tutkintorakenteisiin kuulumattomien opintokokonaisuuksien ja -jaksojen kuvaukset

### 413307S: Cognitive, Motivational and Emotional Base for Learning for Understanding, 6 op

**Voimassaolo:** 01.08.2009 -
**Opiskelumuoto:** Advanced Studies
**Laji:** Course
**Vastuuyksikkö:** Faculty of Education
**Arvostelu:** 1 - 5, pass, fail
**Opintokohteen kielet:** Finnish

    **ECTS Credits:**
    6 cr
    **Language of instruction:**
    Finnish
    **Timing:**
    Contact teaching 29.9.-26.10.2009

**Learning outcomes:**
**Learning objectives**
After completing the module students
- will be able to analyse the significance and meaning of the cognitive, emotional and motivational aspects to learning and their interaction with each other
- will be able to compare and explain the significance and meaning of individual and group action to learning
- will be able to foresee, develop and assess the connection between various technological applications and the self-regulation process in learning

**Contents:**
**Objective**
Student will familiarise themselves with the research explaining the core processes of learning. This knowledge in mind students will analyse the foundation for an apt and skillful learner and his evolution into a life-long learner. In addition, students will be able to explain the relevance of working in groups to building new knowledge and understanding. The objective is that by getting familiar with the learning process students will make use of various technological applications in facilitating learning for understanding and developing new models for learning and teaching in both in school and in worklife.

**Content**
Core processes of learning
- Cognitive strategies and motivational and emotional aspects of learning
- Self-regualation and volition in learning
- Learning as a social phenomenon
- Learning as contextual practice

**Learning activities and teaching methods:**
Lecturs 8 h, collaborative and individual study in contact teaching sessions and online 152 h
**Recommended or required reading:**
Boekarts, M., Pintrich, P. R., & Zeidner, M. (Eds.) (2000). *Handbook of self-regulation*. San Diego CA: Academic Press.

Zimmerman, B.J., Bonner, S., & Kovach, R. (2003). *Developing self-regulated learners: Beyond achievement to self-efficacy.* Washington (D.C.): American Psychological Association.

Woolfolk, A. E., Winne, P. H., & Perry, N. E. (2006). *Educational psychology.* Toronto: Pearson.
**Assessment methods and criteria:**
Active participation in lectures and collaborative and individual study, learning assingments
**Grading:**
Pass/fail
**Person responsible:**
Professor Sanna Järvelä

# 413310S: Design Based Research as a Research Method, 5 op

**Voimassaolo:** 01.08.2009 -
**Opiskelumuoto:** Advanced Studies
**Laji:** Course
**Vastuuyksikkö:** Faculty of Education
**Arvostelu:** 1 - 5, pass, fail
**Opintokohteen kielet:** Finnish

**ECTS Credits:**
5 cr
**Language of instruction:**
Finnish
**Timing:**
Contact teaching 9.11.2009-15.2.2010
**Learning outcomes:**
**Learning objectives**
After completing the module students
- will understand the significance of design-based research in relevance to doing research in Learning Sciences and in educational technology

- will be able to explain the nature of design research as an iterative process and its connection to training needs in practic
- will be able to plan, implement and assess design research as a method

**Contents:**
**Obejctive**
During the course students will get familiar with the research tradition in Learning Sciences. Students will get familiar with design research method, in which new pedagogical practices are developed based on theory, and hence new scientific knowledge is created. This takes place through the phases of theory, iterative analysis, planning, development and experimentation.

**Contents**
- Evolution of Design Research in Learning Sciences
- Concept and working method of Design Research
- Phases of implementing Design Research
- Scope of application of Design Research in developing learning environments

**Learning activities and teaching methods:**
Lectures 8 h, collaborative and individual study in contact teaching sessions and online 126 h
**Recommended or required reading:**
Barab, S. & Squire, K. (2004). Design-based research: Putting a stake in the ground. *The Journal of the Learning Sciences*, 13(1), 1-14. http://inkido.indiana.edu/research/onlinemanu/papers/dbr-jls.pdf

Bereiter, C. (2002). Design research for sustained innovation. *Cognitive Studies, Bulletin of the Japanese Cognitive Science Society,* 9(3), 321-327. http://ikit.org/fulltext/2002Design_Research.pdf

Brown, A. (1992). Design experiments: Theoretical and methodological challenges in creating complex interventions in classroom settings. *The Journal of the Learning Sciences*, 2(2), 141-178. http://inkido.indiana.edu/syllabi/p500/brown1992.pdf

**Assessment methods and criteria:**
Active participation in lectures and collaborative and individual study, a reseach plan
**Grading:**
Pass/fail
**Person responsible:**
Professor Sanna Järvelä


# 413309S: Expertise and Social Innovations, 8 op

**Voimassaolo:** 01.08.2009 -

**Opiskelumuoto:** Advanced Studies

**Laji:** Course

**Vastuuyksikkö:** Faculty of Education

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

**Opintokohteen kielet:** Finnish


**ECTS Credits:**
8 cr
**Language of instruction:**
Finnish
**Timing:**
Autumn semester 2010 or spring semester 2011
**Learning outcomes:**
**Learning objectives**
After completing the module students
- will be able to explain the foundation for research in learning in workplaces
- will be able to compare and explain the aspects of expertise studies
- will be able to explain and interpret the changing demands for developing expertise
- will be able to analyse the problematics of expert and team work
- will understand the relation of education and worklife to facilitating knowledge and expertise

**Contents:**
**Objective**

Students will get familiar with the concepts of expertise and social innovation and their relation to each other. Student will go deeply into the evolution of expertise and into the factors affecting it, as well as into the significance of social innovation in relation to sharing expertise. During the module students will also get acquainted with developing expertise profiles and will analyse the relevance of expertise in the world surrounding us.

**Contents**
- Expertise studies and their various perspectives
- Education, training, worklife and expertise
- Social innovations

**Learning activities and teaching methods:**
Lectures 8 h, seminars 8 h, collaborative and individual study in contact teaching sessions and online 198 h

**Recommended or required reading:**
Bereiter. C. (2002). Design research for sustained innovation. *Cognitive Studies. Bulletin of the Japanese Cognitive Science Society,* 9(3), 321-327.

Bereiter, C. & Scardamalia, M. (1993). *Surpassing ourselves. An inquiry into the nature and implications of expertise.* Chicago: Open Court Publishing Company.

Bruner, J. (1996). *Culture of education.* Cambridge (Mass.): Harvard University Press.

Gruber, H., Palonen, T. Rehrl, M. & Lehtinen, E . (2007). Understanding the nature of expertise: Individual knowledge, social resources and cultural context. In H. Gruber & T. Palonen (Eds.), *Learning in the workplace - new developments* (pp. 227-250). Finnish Educational Research Association. Turku: Painosalama.

Tynjälä, P. (2007). Integratiivinen pedagogiikka osaamisen kehittämisessä. Teoksessa H. Kotila, A. Mutanen & M. V. Volanen (Toim.), *Taidon tieto* (pp. 11-36). Helsinki: Edita.

**Assessment methods and criteria:**
Active participation in lectures and seminars as well as in collaborative and individual study, analyses of expertise. In addition, completion of the module includes working on one's expertise profile for the entire period of the master's degree programme.

**Grading:**
Pass/fail

**Person responsible:**
Professor Sanna Järvelä

## 413027S: Final Examination, 4 op

**Voimassaolo:** 01.08.2005 -

**Opiskelumuoto:** Advanced Studies

**Laji:** Course

**Vastuuyksikkö:** Faculty of Education

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

**Opintokohteen kielet:** Finnish

**ECTS Credits:**
5 ECT

**Language of instruction:**
Finnish

**Timing:**
Masters studies 4-5 [th] year

**Learning outcomes:**
The students familiarize themselves with an area in education of their own choice and interest.

**Contents:**
One of the following special areas of education will studied. The examination of the following areas (1-11) will be in the form of a book exam, essay, series of relevant lectures, or other equivalent work.
1) early childhood education
2) developmental psychology and didactics
3) sociology of education and educational policy
4) special education

5) youth education
6) adult education
7) comparative education
8) educational and personnel management
9) philosophy of education and the history of education
10) educational planning and the economics of education
11) educational technology

The method and form of examination should be discussed with the respective member of staff/coordinator.

**Learning activities and teaching methods:**
Independent work

**Recommended or required reading:**
The material that the student will be examined on is specified separately for each different area. The reading lists can be obtained at the faculty office or online on the faculty's web pages, depending on the area.

**Assessment methods and criteria:**
Exam/other (must be discussed with coordinator)

**Grading:**
0-5

**Person responsible:**
Vastuuhenkilöt erityisaloittain:
1. Teemu Hanhela
2. Jouni Peltonen
3. Kalle Reinikainen
4. Marko Kielinen
5. Veli-Matti Ulvinen
6. Mari Mielityinen
7. Mari Mielityinen
8. Jouni Peltonen
9. Ari Kivelä
10. Eva Raudasoja ja Kimmo Kontio
11. Pirkko Hyvönen

**Other information:**
Those students doing the Edutool Master's Programme should arrange their final examination with professor Sanna Järvelä.

# 410027Y: Learning Communities and Distributed Expertise, 5 op

**Voimassaolo:** 01.08.2009 -

**Opiskelumuoto:** Other Studies

**Laji:** Course

**Vastuuyksikkö:** Faculty of Education

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

**Opintokohteen kielet:** Finnish

**Language of instruction:**
Finnish

**Learning outcomes:**

**Learning objectives**
After completing the module students
- will be able to explain the theoretical foundation for distributed expertise and learning communities
- will be able to evaluate the role of technology and online communities as parts of distributed expertise
- will be able to apply the theoretical framework for distributed expertise in planning of the practices for training and worklife

**Contents:**

**Objective**
Students will get familiar with the theoretical framework for distributed expertise and learning communities and the latest scientific research in the field. Student will get acquainted with the role of cognitive tools and learning communities in facilitating intelligent action and distributed expertise. In addition, students will examine the practical applications (e.g. self-organising online communities and intelligent phones as cognitive tools), which are used in support of intelligent action.

**Contents**

- Distributed expertise
- Technology as a tool for distributed expertise
- Learning communities

**Learning activities and teaching methods:**
Lectures 6 h, seminars 4 h, collaborative and individual study in contact teaching sessions and online 124 h
**Recommended or required reading:**
Cress, U. & Kimmerle, J. (2008). A Systematic and cognitive view on collaborative knowledge building with wikis. *Computer Supported Collaborative Learning,* 3, 105-122.

Hakkarainen, K., Lipponen, L., Muukkonen, H. & Seitamaa-Hakkarainen, P. (2001). Oppimisympäristöjen kognitiivinen tutkimus. Teoksessa Saariluoma, P., Kamppinen, M. & Hautamäki, A. (Toim.) *Moderni kognitiotiede.* Helsinki: Gaudeamus.

Pea, R. D. (1993). Practices of distributed intelligence and designs for education. In Salomon G.  (Ed.) *Distributed cognitions: Psychological and educational considerations.* Cambridge: Cambridge University Press.

**Assessment methods and criteria:**
Active participation in lectures and seminars as well as in collaborative and individual study, learning assignments
**Grading:**
Pass/fail
**Person responsible:**
Professor Sanna Järvelä


# 410026Y: Learning Environments and Communication, 5 op

**Voimassaolo:** 01.08.2009 -

**Opiskelumuoto:** Language and Communication Studies

**Laji:** Course

**Vastuuyksikkö:** Faculty of Education

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

**Opintokohteen kielet:** Finnish


**ECTS Credits:**
5 cr
**Language of instruction:**
Finnish
**Timing:**
Contact teaching 3.9.-28.9.2009
**Learning outcomes:**
**Learning objectives**
After completing the module students
- will be able to explain the nature of educational technology as an evolving science and its theoretical foundation
- will be able to apply, implement and evaluate technology and its use in facilitating learning
- will be able to plan, produce and evaluate scientific reports
- will be able to collaborate in student communities

**Contents:**
**Objective**
Students will get familiar with educational technology in the framework of learning theory, research and evolving technology. The objective is to get to know learning environments, which use technology, and to get tools to evaluate and implement these kinds of learning environments in teaching and training. In addition, students will become accustomed to scientific reporting and academic writing.

**Contents**
- Educational technology as a science and its theoretical framework
- Technology-enhanced learning
- Web-based learning environments
- Characteristics of scientific reporting and academic writing, writing process

**Learning activities and teaching methods:**
Lectures 6 h, exercises 16 h, collaborative and independent study in contact teaching sessions and online 112 h
**Target group:**

Students in Edutool Master's Degree Programme
**Recommended or required reading:**
The APA Manual (2001). *Publication manual of the American Psychological Association*. Washington: American Psychological Association.

Bransford, J. D., Brown, A. L. & Cocking, R. R. (Eds.) (2000). *How people learn: Brain, mind, and school.* Washington: National Academy Press. [http://books.nap.edu/catalog.php?record_id=9853](http://books.nap.edu/catalog.php?record_id=9853)

Järvelä, S., Häkkinen, P. & Lehtinen, E. (Toim.) (2006). *Oppimisen teoria ja teknologian opetuskäyttö.* Helsinki: WSOY.

Mayer, R. E. (Ed.) (2005). *The Cambridge handbook of multimedia learning.* New York: Cambridge University Press.

Sawyer, R. K. (Ed.) (2006). *The Cambridge handbook of the learning sciences.* NY: Cambridge University Press.
**Assessment methods and criteria:**
Active participation in lectures and exercises and collaborative and individual study, learning assignments
**Grading:**
Pass/fail
**Person responsible:**
Professor Sanna Järvelä


# 413308S: Learning and Collaboration in Technology-Enchanted Contexts, 6 op

**Voimassaolo:** 01.08.2009 -

**Opiskelumuoto:** Advanced Studies

**Laji:** Course

**Vastuuyksikkö:** Faculty of Education

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

**Opintokohteen kielet:** Finnish


**Language of instruction:**
English
**Learning outcomes:**
**Learning Objectives**

After completing the module students
• will understand the theoretical aspects of collaborative learning and various pedagogical models in CSCL
• will be able to design, evaluate and assess collaborative learning in technology-enhanced environments
• will be able to analyse collaborative learning process and to find ways for teachers and educators to implement and enhance collaboration
• will have strengthen their collaborative academic writing and argumentation skills
**Contents:**
**Objective**
Computer-Supported Collaborative Learning (CSCL) is an emerging branch in the interdisciplinary field of learning sciences that studies learning and teaching. Students will comprehend and review theoretical background for collaborative learning and evaluate CSCL. Students will also deepen their understanding of particular CSCL themes in various educational and work life contexts from both and theoretical and practical perspectives.

**Contents**
• Theories of Collaborative Learning and CSCL
• Enhancing CSCL in Various Educational and Work Life Contexts
• State-of-the-Art of CSCL Research
**Learning activities and teaching methods:**
Lectures 8 h, collaborative networking and studying in international teams 152 h
**Target group:**
Students in Edutool Master's Degree Programme
**Recommended or required reading:**
Dillenbourg, P., Järvelä, S. & Fisher, F. (2009). The evolution of research on computer-supported collaborative learning: From design to orchestration. In N. Balacheff, S.

Ludvigsen, T. de Jong, T., A. Lazonder & S. Barnes (Eds.) Technology enhanced learning: Principles and products (pp. 3-19). Netherlands: Springer.

Resnick, L. B., Levine, J. M. & Teasley, S. D. (Eds.) (2001). Perspectives on socially shared cognition. Washington (D.C.): American Psychological Association.

Strijbos, J. W., Kirschner, P. A., & Martens, R. L. (Eds.) (2004). What we know about CSCL: And implementing it in higher education. Boston, MA: Kluwer/Springer.
**Grading:**
Pass/fail
**Person responsible:**
Professor Sanna Järvelä


## 413306S: Pedagogical Design and Use of Technology in Educational Systems, 5 op

**Voimassaolo:** 01.08.2009 -

**Opiskelumuoto:** Advanced Studies

**Laji:** Course

**Vastuuyksikkö:** Faculty of Education

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

**Opintokohteen kielet:** Finnish


**ECTS Credits:**
5 cr
**Language of instruction:**
Finnish
**Timing:**
Contact teaching 27.10.-7.12.2009
**Learning outcomes:**
**Learning objectives**
After completing the module students
- will know how to compare, evaluate and assess the pedagogical use of ICT accross educational systems
- will be able to apply fairly the collaborative learning models accross school levels
- will understand the role of counselling and tutoring processes as parts of the planning of technolgy-enhanced learning

**Contents:**
**Objective**
Students will learn about the needs, situations, and practices of pedagogical use of ICT in our educational system. The objective is to understand the special characteristics of the educational system, and the challenges and opportunities of pedagogical use of ICT. Students will also examine collaborative learning and the relationhips between counselling and learning.

**Contents**
- Using technology in different educational systems
- Planning of technology-enhanced teaching and the models of collaborative learning

**Learning activities and teaching methods:**
Lectures 6 h, collaborative and individual study in contact teaching sessions and online 128 h
**Recommended or required reading:**
Bell, P., Lewenstein, B., Shouse, A. W. & Feder, M. A. (Eds.) (2009). *Learning science in informal environments: People, places, and pursuits.* Committee on Learning Science in Informal Environments. National Research Council of the National Academics. Washington (D.C.): The National Academic Press. http://www.nap.edu/catalog.php?record_id=12190

Hyötyniemi, Y. (Toim.) (2003). *Muuttuuko mikään? Näkökulmia tieto- ja viestintätekniikan opetuskäytön strategiaan.* Opetusministeriön julkaisuja 2003:16. http://www.minedu.fi/export/sites/default/OPM/Julkaisut/2003/liitteet/opm_105_opm16.pdf?lang=fi

Kaisto, J., Hämäläinen, T., & Järvelä, S. (2007). *Tieto- ja viestintätekniikan pedagoginen vaikuttavuus pohjoisessa Suomessa.* Acta Universitas Ouluensis E 98. Oulu: Oulu University Press. http://edtech.oulu.fi/files/acta_e98_kaistoetal.2007.pdf

Kankaanranta, M. & Puhakka, E. (2008). *Kohti innovatiivista tietotekniikan opetuskäyttöä.* Kansainvälisen SITES 2006 -tutkimuksen tuloksia. Jyväskylän yliopisto. Koulutuksen Tutkimuslaitos. Jyväskylä: Jyväskylän yliopistopaino. http://ktl.jyu.fi/img/portal/13816/SITES-julkaisu.pdf

Pöysä, J., Hurme, T-R., Launonen, A., Hämäläinen, T., Järvelä, S. & Häkkinen, P. (2007). *Millaista on laadukas yhteisöllinen oppiminen verkossa? Osallistujalähtöinen näkökulma yhteisöllisen oppimisen ja toiminnan käytänteisiin Suomen virtuaaliyliopiston tieteenalaverkostojen verkkokursseilla.* Suomen virtuaaliyliopiston julkaisuja 3/07. Helsinki 2007. http://www.virtuaaliyliopisto.fi/data/files/svy-julkaisut/svy_julkaisu3.pdf

**Assessment methods and criteria:**
Active participation in lectures and collaborative and individual study, learning assignments
**Grading:**
Pass/fail
**Person responsible:**
Professor Sanna Järvelä


# 410028Y: Planning and Management of Teaching and Educational Projects, 5 op

**Voimassaolo:** 01.08.2009 -

**Opiskelumuoto:** Other Studies

**Laji:** Course

**Vastuuyksikkö:** Faculty of Education

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

**Opintokohteen kielet:** Finnish


**ECTS Credits:**
5 cr
**Language of instruction:**
Finnish
**Timing:**
Autumn semester 2010 or spring semester 2011
**Learning outcomes:**
**Learning objectives**
After completing the module students
- will be able to make a project plan
- will know how to plan, develop and assess teaching and training projects based on recent research in Learning Sciences
- will be able to apply their own expertise on the content, and planning and implementation of the project
- will be able to act as an expertise of his/her own field in a project group

**Contents:**
**Objective**
Students will familiarise themselves with the planning, implementation, administration and assessment of teaching and training projects. During the module students will study the principals and characteristics of project work. In addition, students will learn to consider the challenges involved in intergrating expertise from various fields as a part of the planning process.

**Contents**
- Planning, implementing and administering of a project
- Working in a project and designing training

**Learning activities and teaching methods:**
Lectures 6 h, seminars 4 h, collaborative and individual study in contact teaching sessions and online 124 h
**Recommended or required reading:**
Anttila, P *. Se on projekti - vai onko? Kulttuurialan tuotanto- ja palveluprojektien hallinta*. Hamina: Akatiimi.

Lind, O. (2001). *Näin tehdään onnistunut projekti*. Tampere: Ruottukka Oy.

Virkki, P. & Somermeri, A. (2002). *Projektityö kehittämisen moottori*. Helsinki: Edita Prima Oy.
**Assessment methods and criteria:**
Active participation in lectures and seminars as well as in project group work, individual study, writing and presenting a project plan
**Grading:**

Pass/fail
**Person responsible:**
Professor Sanna Järvelä

## 413008S: Thesis studies, 35 op

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

**ECTS Credits:**
40 ECT
**Language of instruction:**
Finnish
**Timing:**
Masters level studies (4-5 [th] year)
**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 agreed.
**Grading:**
approbatur–laudatur.
**Person responsible:**
Pauli Siljander

## 413005S-05: a) Advanced Course in Quantitative Research Methods, 5 op

**Voimassaolo:** 01.08.2005 - 31.07.2012
**Opiskelumuoto:** Advanced 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:**
Spring semester 2010
**Learning outcomes:**
After completing the module students
- will be able to analyse and interpret data by using quantitative research methods
- will gain a holistic view of the research process and will know how to write a scientific report
- will be able to evaluate the reliability and ethics of the reseach

**Contents:**
More information on the contents, see the description of the module 413005S here in Weboodi
OR
the study guide of the Faculty of Education 2008-2011, p. 73
http://wwwedu.oulu.fi/opas0811/luku07.pdf
**Other information:**
Students in Edutool Master's Degree Programme will choose **EITHER** 413005S-05 Quantitative **OR** 413005S-06 Qualitative module 5 cr.


## 413005S-06: b) Advanced Course in Qualitative Research Methods, 5 op

**Voimassaolo:** 01.08.2005 - 31.07.2012

**Opiskelumuoto:** Advanced 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:**
Spring semester 2010
**Learning outcomes:**
After completing this module students
- will be able to analyse and interpret data by using qualitative research methods
- will gain holistiv view of the research process and will know how to write a scientific report
- will be able to evaluate the reliability and ethics of the research
**Contents:**
More information on the contents, see the description of the module 413005S here in Weboodi
OR
the study guide of the Faculty of Education 2008-2011, p. 73
http://wwwedu.oulu.fi/opas0811/luku07.pdf
**Other information:**
Students in Edutool Master's Degree Programme will choose **EITHER** 4143005S-05 Quantitative **OR** 413005S-06 Qualitative module 5 cr.