

# Opasraportti

## KTK - Learning, Education and Technology (LET), KM (2019 - 2020)

Learning, Education and Technology (LET) is a full-time two-year international master's programme. After completing the programme, students are awarded a Master of Arts (Education) degree. The core of the education consists of three theoretical viewpoints: self-regulated learning, collaborative learning, and technology-enhanced learning. Each of these aspects is discussed both in theory and in practice.

The programme aims to develop knowledge and competencies needed in modern education, namely skills for designing, conducting, assessing and analysing versatile learning situations both in face-to-face and technology-enhanced learning contexts. Working-life connections are highlighted throughout the programme. The studies are implemented in collaboration with national and international research and teaching partners.

LET programme is built on over 20 years of groundbreaking research in the Learning and Educational Technology Research Unit. The unit performs top research on learning sciences in collaboration with international networks by investigating how people learn. LET students are in close connection with the latest research in their everyday studies.

## Tutkintorakenteet

### LET - Master's Programme in Learning, Education and Technology

Tutkintorakenteen tila: arkistoitu

Lukuvuosi: 2019-20

Lukuvuoden alkamispäivämäärä: 01.08.2019

### General Studies: Language, Communication and Orientation Studies (5 op) (5 op)

Students must complete 5 credits of general studies. The general studies form an orientation to the university studies in Finland and particularly to the LET programme. The general studies are divided into language studies (2 credits) and communication and orientation studies (3 credits).

Students must complete 2 credits of language studies:

- *Foreign students* must complete the Survival Finnish Course (code 900017Y). If they have already completed the Survival Finnish course or an equivalent Finnish course, or already have basic skills in Finnish, they can choose a more advanced level Finnish course (min. 2 credits) or a course in another language (min. 2 credits) from among the courses offered by the Languages and Communication Unit at the University.

Examples of courses offered:

900013Y Beginners' Finnish Course 1, 2 ECTS cr

900053Y Beginners' Finnish Course 2, 4 ECTS cr  
 900054Y Conversational Skills in Finnish, 2 ECTS cr  
 900020Y Finnish for Advanced Students, 2 ECTS cr  
 900061Y Finnish Language Workshop, 2 ECTS cr  
 900015Y Intermediate Finnish Course 1, 4 ECTS cr  
 900016Y Intermediate Finnish Course 2, 4 ECTS cr

- *Finnish citizens* must complete the Swedish language course (offered by the Language Centre at the university, code 901032Y and 901033Y). If they have already completed an equivalent course as a part of their Bachelor's degree, they must choose a min. 2 credits of other language studies from among the courses offered by the Languages and Communication Unit at the University. (If the student's previous studies have not included studies in Swedish, s/he can be exempted from these studies by application to the faculty.)

405518Y: Communication and orientation studies, 3 op

900017Y: Survival Finnish, 2 op

## Major Subject Studies: Advanced Studies in Educational Sciences (80 op) (80 op)

In the LET programme, all students must complete 80 credits of major subject studies (code H250511).

H250511: Advanced Studies in Educational Sciences (LET), 80 op

### *Pakolliset opinnot*

- 413312S: Collaborative Learning, 5 op
- 413318S: Socially shared regulation of learning, 5 op
- 413319S: Computer supported collaborative learning, 5 op
- 413320S: Current trends in LET research, 5 op
- 413321S: Problem-solving case 2, 10 op
- 413322S: Entrepreneurship in education, 5 op
- 408531S: Qualitative Research, 5 op
- 408532S: Quantitative Research, 5 op
- 408043S: Pro gradu -tutkielma, 30 op
- 408044S: Graduseminaari, 5 op
- 408045S: Tiivistelmä/ maturiteetti, 0 op

## Minor Subject (25 ECTS cr) (vähintään 25 op)

In the LET programme, all students must complete minor subject studies in Minor Subject Studies: Learning, Education and Technology 25 credits (code A255301).

A255301: Learning, Education and Technology, 25 op

### *Pakollisuus*

- 418023P: Oppimisen perusteet, 5 op
- 418024P: Itsesäätoinen oppiminen, 5 op
- 418025P: Oppimisen ympäristöt ja teknologiat, 5 op
- 418026P: Ongelmanratkaisutyöskentely 1, 10 op

## Optional Studies (10 op) (vähintään 10 op)

In the LET programme, students can select a total of 10 credits of optional studies. Students can select their optional studies, e.g., on the basis of their previous studies, thesis topic, or personal interest.

*Kindly note that in order to complete courses by other departments or Languages and Communications Center, etc. students might need to apply for a study right or they might be required to register by certain annual deadline. Students are advised to familiarise themselves with the policies and procedures of the department in question.*

# Opintojaksojen kuvaukset

## Tutkintorakenteisiin kuuluvien opintokohteiden kuvaukset

### 405518Y: Communication and orientation studies, 3 op

**Voimassaolo:** 01.08.2017 -

**Opiskelumuoto:** Yleisopinnot

**Laji:** Opintojakso

**Vastuuyksikkö:** Kasvatustieteiden tiedekunta

**Arvostelu:** 1 - 5, hyv, hyl

**Opettajat:** Niina Impiö

**Opintokohteen kielet:** englanti

### 900017Y: Survival Finnish, 2 op

**Voimassaolo:** 01.08.1995 -

**Opiskelumuoto:** Kieli- ja viestintäopinnot

**Laji:** Opintojakso

**Vastuuyksikkö:** Kieli- ja viestintäkoulutus

**Arvostelu:** 1 - 5, hyv, hyl

**Opintokohteen kielet:** suomi

**Leikkaavuudet:**

ay900017Y Suomi vieraana kielenä 2.0 op

**Taitotaso:**

A1.1

**Asema:**

Kurssi on tarkoitettu kaikkien tiedekuntien kansainvälisille opiskelijoille.

**Lähtötasovaatimus:**

Aikaisempia suomen kielen opintoja ei tarvita.

**Laajuus:**

2 op

**Opetuskieli:**

Kurssilla käytetään opetuskielenä sekä suomea että englantia.

**Ajoitus:**

-

**Osaamistavoitteet:**

Kurssin suoritettuaan opiskelija ymmärtää ja käyttää kaikkein yleisimpiä arkipäivään liittyviä perusilmauksia ja -fraaseja. Hän osaa etsiä yksittäisiä tietoja yksinkertaisimmista teksteistä. Lisäksi opiskelija tunnistaa suomen kielen keskeisimmät ominaispiirteet ja suomalaisen tavan kommunikoida.

**Sisältö:**

Kurssi on johdantokurssi, jonka aikana opetellaan jokapäiväiseen elämään liittyviä hyödyllisiä fraaseja, sanastoa, ääntämistä sekä vähän peruskielioppia. Kurssin sisältöön kuuluvat seuraavat aihealueet ja viestintätilanteet: yleistä perustietoa suomen kielestä; tervehtiminen, kiittäminen, anteeksipyyttäminen; esittäytyminen, perustietojen kertominen ja samojen asioiden kysyminen puhekeskustelussa; numerot, kellonajat, viikonpäivät, vuorokaudenajat, ruoka, juoma ja hintojen tiedustelu.

Kielen rakenteista opitaan persoonapronominit ja niiden possessiivimuodot, peruslauseen ja kysymyslauseen muodostaminen, muutaman verbin taivutus, yksikön partitiivin käytön perusasiat ja paikansijoista missä-kysymykseen vastaaminen.

**Järjestämistapa:**

Lähiopetusta, verkko-opetusta ja muuta itsenäistä työskentelyä. Lisäksi yksi ryhmä järjestetään kokonaan verkko-opiskeluna.

**Toteutustavat:**

Luentoja kaksi kertaa viikossa (26 h, sisältäen loppukokeen) ja itsenäistä opiskelua (24 h).

**Kohderyhmä:**

Yliopiston kansainväliset perus- ja jatkotutkinto-opiskelijat sekä vaihto-opiskelijat.

**Esitietovaatimukset:**

-

**Yhteydet muihin opintojaksoihin:**

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**Oppimateriaali:**

Jaetaan kurssin aikana.

**Suoritustavat ja arviointikriteerit:**

Osallistuminen kontaktiopetukseen ja itsenäinen työskentely. Opiskelijan on osallistuttava säännöllisesti oppitunneille, tehtävä annetut kotitehtävät ja läpäistävä kurssin lopussa pidettävä koe.

Lue lisää [opintosuoritusten arvostelusta](#) yliopiston verkkosivulta.

**Arviointiasteikko:**

Kurssi arvioidaan asteikolla hyväksyty/hylätty. Arvioinnissa otetaan huomioon opiskelijan aktiivisuus, tehtävien suorittaminen sekä loppukoe.

**Vastuuhenkilö:**

Anne Koskela

**Työelämäyhteistyö:**

-

**Lisätiedot:**

Kurssille ilmoitaudutaan WebOodissa.

**H250511: Advanced Studies in Educational Sciences (LET), 80 op**

**Voimassaolo:** 01.08.2017 -

**Opiskelumuoto:** Syventävät opinnot

**Laji:** Kokonaisuus

**Vastuuyksikkö:** Kasvatustieteiden tiedekunta

**Arvostelu:** 1 - 5, hyv, hyl

**Opintokohteen kielet:** englanti

**Laajuus:**

80 op

**Opetuskieli:**

English

**Kohderyhmä:**

1st and 2nd year students on the LET Master's Programme.

**Lisätiedot:**

In the LET programme, all students must complete 80 credits of major subject studies.

*Pakolliset opinnot*

**413312S: Collaborative Learning, 5 op**

**Voimassaolo:** 01.08.2011 -

**Opiskelumuoto:** Syventävät opinnot

**Laji:** Opintojakso

**Vastuuyksikkö:** Kasvatustieteiden tiedekunta

**Arvostelu:** 1 - 5, hyv, hyl

**Opintokohteen kielet:** englanti

**Laajuus:**

5 ECTS

**Opetuskieli:**

English

**Ajoitus:**

1<sup>st</sup> year, 3rd period

**Osaamistavoitteet:**

After completion of this course, the student is able to

- name different theoretical approaches to collaborative learning,
- identify the interaction processes in collaborative learning situations,
- describe how a teacher can enhance collaborative learning, and
- apply theoretical knowledge of collaborative learning to real collaborative situations.

**Sisältö:**

- Socio-cognitive and socio-cultural perspectives on collaborative learning
- Interaction in collaborative learning situations
- Scaffolding collaborative learning

**Järjestämistapa:**

- Face-to-face and online teaching, 40h: lecture 15h, practice 30h
- Online, individual and collaborative learning, 95h

**Toteutustavat:**

Learning activities consist mainly of collaborative activities supported by technology. Flipped classroom method is applied throughout the course.

**Kohderyhmä:**

1st year students on the LET Master's Programme

**Yhteydet muihin opintojaksoihin:**

(418023P) Foundations of Learning

**Oppimateriaali:**

Dillenbourg, P. (1999). What do you mean by 'collaborative learning? In P. Dillenbourg (Ed.), Collaborative Learning: Cognitive and computational approaches. Oxford UK, Elsevier, 1–19.

Enyedy, N. & Stevens, R. (2014). Analyzing collaboration. The Cambridge Handbook of the Learning Sciences. Cambridge University Press, 191-212.

The International Handbook of Collaborative Learning (2013). Oxford: Routledge.

Roschelle, J. (1992). Learning by collaborating: Convergent conceptual change. The Journal of the Learning Sciences, 2(3), 235–276.

YVuopala, E., Hyvönen, P. & Järvelä, S. (2016). Interactional features in successful collaborative learning in virtual learning spaces. Active Learning in Higher Education 1/2016. and/or other contemporary readings in the field of learning and educational technology, to be announced in the beginning of the course.

**Suoritustavat ja arviointikriteerit:**

Completion of the course requires active participation in face-to-face teaching and collaborative work. It also requires successful completion of all the learning assignments and exercises, and writing posts for the personal digital portfolio.

5: The student has participated very actively in face-to-face meetings and in collaborative work. S/he is able to express a deep and wide understanding of all the course contents both in group assignments and in the digital portfolio. All assignments are reflective in nature, and they represent deep familiarity with all course materials.

4: The student has participated very actively in face-to-face meetings and in collaborative work. S/he is able to express a deep understanding of all course contents both in group assignments and in the digital portfolio. All assignments are reflective in nature, and they represent familiarity with all course materials.

3: The student has participated actively in face-to-face meetings and in collaborative work. S/he is able to express an understanding of the core course contents both in group assignments and in the digital portfolio. All assignments represent familiarity with the main course materials.

2: The student has participated in most of the face-to-face meetings and in collaborative work. S/he is able to express an understanding of some of course contents both in the group assignments and in the digital portfolio. The assignments represent familiarity with the main course materials, but on a superficial level.

1: The student has been passive in face-to-face meetings and in collaborative work. S/he is able to express the understanding of some of the course contents, but only on a superficial level. The assignments represent familiarity with some of the course materials.

**Arviointiasteikko:**

0-5

**Vastuuhenkilö:**

Essi Vuopala

**Työelämäyhteistyö:**

Teachers and other experts representing various educational levels are visiting the course and introducing how the idea of collaborative learning is applied.

**413318S: Socially shared regulation of learning, 5 op**

**Voimassaolo:** 01.08.2017 -

**Opiskelumuoto:** Syventävät opinnot

**Laji:** Opintojakso

**Vastuuyksikkö:** Kasvatustieteiden tiedekunta

**Arvostelu:** 1 - 5, hyv, hyl

**Opettajat:** Jonna Malmberg

**Opintokohteen kielet:** englanti

**Laajuus:**

5 op

**Opetuskieli:**

English

**Ajoitus:**

1 st year, 3rd period

**Osaamistavoitteet:**

After completion of this course, the student is able to

- identify and define the social forms of regulated learning
- explain how social forms of regulation occur in interaction
- utilize both theoretical knowledge and different technological tools for supporting social forms of regulated learning

**Sisältö:**

- Socially shared regulation of learning
- Co-regulation of learning
- Technology to support regulation in collaboration

**Järjestämistapa:**

Face-to-face: 30h: lectures 10h, practice 20h

Individual, collaborative and on-line: 115h

**Toteutustavat:**

Lectures and other learning activities that consist mainly of collaborative activities supported with technology. Students reflect on their own learning and expertise in a digital portfolio.

**Kohderyhmä:**

First year LET master students

**Esitietovaatimukset:**

(418024P) Self-Regulated Learning

**Oppimateriaali:**

Zimmerman, B. J. & Schunk, D. H. (2011). Motivational sources and outcomes of self-regulated learning and performance. In B. Zimmerman & D. Schunk (Eds.), *Handbook of self-regulation of learning and performance* (pp. 49–64). New York, NY: Routledge

Järvelä, S., Kirschner, P. A., Panadero, E., Malmberg, J., Phielix, C., Jaspers, J., & Järvenoja, H. (2015). Enhancing socially shared regulation in collaborative learning groups: designing for CSCL regulation tools. *Educational Technology Research and Development*, 63(1), 125-142.37–41.

And/or other contemporary readings in the field of learning and educational technology, to be announced in the beginning of the course.

**Suoritustavat ja arviointikriteerit:**

Completion of the course requires active participation in face-to-face teaching, successful completion of all individual learning tasks, and reflection of one's own learning in the digital portfolio.

5= The student has participated actively in all face-to-face meetings and done all required individual tasks according to the course requirements. All tasks represent very good familiarity with course contents, course materials, and additional materials. The student is able to express deep understanding of core course contents in the digital portfolio.

4= The student has participated actively in all face-to-face meetings and done all required individual tasks according to the course requirements. All tasks represent good familiarity with course contents and course materials. The student is able to express understanding of core course contents in the digital portfolio.

3= The student has participated actively in most of the face-to-face meetings and done all required individual tasks. Tasks represent mostly a good familiarity with course contents and core course materials. Student is able to express understanding of core course contents in the digital portfolio.

2= The student has participated in several face-to-face meetings and done individual tasks, but there are few tasks missing. Tasks are done mostly based on one's own experiences and opinions, not on course literature and other course materials. Reflection of one's own learning in the digital portfolio is mostly superficial and irregular.

1= The student has participated in some face-to-face meetings and done individual tasks, but there are tasks missing. Tasks are done based on one's own experiences and opinions, not on the course literature and other course materials. Reflection of one's own learning in the digital portfolio is superficial and irregular.

Criteria for not passing the course: A student has been passive or absent from face-to-face meetings, and there are assignments missing or they represent superficial understanding of the course content. A student is not able to express understanding of course content either in digital portfolio or in individual tasks.

**Arviointiasteikko:**

0-5

**Vastuhenkilö:**

Jonna Malmberg

**413319S: Computer supported collaborative learning, 5 op**

**Voimassaolo:** 01.08.2017 -

**Opiskelumuoto:** Syventävät opinnot

**Laji:** Opintojakso

**Vastuuyksikkö:** Kasvatustieteiden tiedekunta

**Arvostelu:** 1 - 5, hyv, hyl

**Opettajat:** Essi Vuopala

**Opintokohteen kielet:** englanti

**Laajuus:**

5 op

**Opetuskieli:**

English

**Ajoitus:**

2nd year, 1st period

**Osaamistavoitteet:**

After completion of this course, the student is able to

- Define the concept of Computer-Supported Collaborative Learning
- Apply theoretical ideas of collaborative learning in the context of computer-supported learning environments.
- Recognize the role of orchestration and scripting in CSCL
- Use emerging technologies as CSCL tools
- Use contemporary analytical approaches for analysing learning activities within CSCL learning contexts

**Sisältö:**

- The concept of computer-supported collaborative learning
- Theoretical models of CSCL
- Disruptive and emergent technologies for supporting CSCL

- Design and set up of CSCL environment
- Learning analytics for analysing collaborative learning activities

### **Järjestämistapa:**

Face-to-face and online teaching 30h, lectures 10h, practice 20h  
Individual and online studying, 105h

### **Toteutustavat:**

Learning activities consist of both flipped classroom lectures with meetings where lectures are being discussed and hands-on CSCL workshops where emergent and disruptive technologies are applied to design CSCL activities.

### **Kohderyhmä:**

2nd year students on the LET Master's Programme

### **Yhteydet muihin opintojaksoihin:**

(418023P) Foundations of learning

(418025P) Learning environments and technologies

### **Oppimateriaali:**

Jeong, H., & Hmelo-Silver, C. E. (2016). Seven Affordances of Computer-Supported Collaborative Learning: How to Support Collaborative Learning? How Can Technologies Help?. *Educational Psychologist*, 41(1), 1-19.

Järvelä, S., & Hadwin, A. F. (2013). New frontiers: Regulating learning in CSCL. *Educational Psychologist*, 48(1), 25-39.

Ludvigsen, S., Lund, A., Rasmussen, I., & Säljö, R. (2011). Learning across sites. *New Tools, Infrastructures and Practices. Abingdon: Routledge (New perspectives on learning and instruction)*. Online verfügbar unter <http://www.gbv.de/dms/zbw/619420359.pdf>.

### **Suoritustavat ja arviointikriteerit:**

Completion of the course requires active participation in face-to-face teaching, and collaborative and independent work. It also requires successful completion of all the learning assignments and exercises, and writing posts for the personal digital portfolio.

Learning outcomes are assessed through group and individual assignments.

5: All course assignments are comprehensive in terms of the contents of the course, and they represent very deep and wide familiarity with course materials, environments and technologies. The student is able to express that s/he has understood and is able to combine technological tools and theories of collaborative learning. Learning assignments are reflective in nature. The student participates very actively in group work, and contributes to the group assignments. Individual products represent very deep knowledge and are exceptional contribution to the field of the CSCL.

4: All course assignments are comprehensive in terms of the contents of the course, and they represent good familiarity with course materials, environments and technologies. The student is able to express that s/he has understood and is able to combine technological tools and theories of collaborative learning. S/he participates very actively in group work and contributes to the group assignments. Individual products represent deep knowledge and are very contribution to the field of the CSCL.

3: All course assignments are comprehensive in terms of the main contents of the course, and they represent familiarity with course materials, environments and technologies. The student is able to express that s/he has understood the key concepts and theories in the context of CSCL. The student participates actively in group work, and contributes to the group assignments. Individual products represent good knowledge and are a good contribution to the CSCL.

2: The student has done most of the course assignments, but they do not cover all the contents of the course and the use of course materials, environments and technologies is mostly superficial. The student is able to express his understanding of some of the key concepts and theories in CSCL. S/he participates in most of the group meetings, but his/her contribution to the group activities is not clearly indicated. Individual products represent mostly superficial expertise and are not a clear contribution to the field of the CSCL.

1: The student has not done all the course assignments, or the assignments are superficial in terms of the main course contents and the use of course materials, environments and technologies. The student is able to express his understanding of a few concepts and theories of the CSCL, but on a very superficial level. His/her participation in group work is passive, and his/her contribution to the group activities is not clearly indicated. The student participates in most of the group meetings, but his/her contribution to the group activities is not clearly indicated. Individual products represent superficial expertise and do not contribute to the field of the CSCL.

### **Arviointiasteikko:**

0-5



**Vastuuhenkilö:**

Essi Vuopala

**Lisätiedot:**

- 1) Course participants will use online professional development communities and networks as support function for their learning activities.
- 2) Technology choices in the CSCL course reflect the socio-technical context in the average workplace of an educational expert.

**413320S: Current trends in LET research, 5 op**

**Voimassaolo:** 01.08.2017 -

**Opiskelumuoto:** Syventävät opinnot

**Laji:** Opintojakso

**Vastuuyksikkö:** Kasvatustieteiden tiedekunta

**Arvostelu:** 1 - 5, hyv, hyl

**Opettajat:** Essi Vuopala

**Opintokohteen kielet:** englanti

**Laajuus:**

5 op

**Opetuskieli:**

English

**Ajoitus:**

1st year, 4th period

**Osaamistavoitteet:**

After completion of this course, the student is able to

- Identify and elaborate some of the current trends in the field of learning sciences
- Justify their own research interest and locate it in the field of current research
- Compose and critically evaluate scientific text

**Sisältö:**

- Current trends in the field of learning sciences
- Ongoing research projects in LET

**Järjestämistapa:**

Face-to-face: 20h: 10h lectures, 10h practice

Individual: 115h

**Toteutustavat:**

Seminars where different researchers present their research in the field of learning and educational technology. Individual assignment will be written based on the seminars and current and relevant scientific articles.

**Kohderyhmä:**

First year LET master students, other Master's or PhD level students in the Faculty of Education.

**Esitietovaatimukset:**

Basic studies in learning, education and technology or other educational sciences.

**Oppimateriaali:**

Current scientific articles in the field of learning sciences and educational technology, will be announced in the beginning of the course.

**Suoritustavat ja arviointikriteerit:**

Completion of the course requires active participation in face-to-face teaching and successful completion of the individual learning assignment.

5= The student has participated actively in all face-to-face meetings and done the required individual task according to the course requirements. The task represents very good familiarity with course contents and relevant additional materials.

4= The student has participated actively in all face-to-face meetings and done the required individual task according to the course requirements. The task represents good familiarity with course contents and relevant additional materials.

3= The student has participated actively in most of the face-to-face meetings and done the required individual task according to the course requirements. The task represents familiarity with course contents and relevant additional materials.

2= The student has participated in several face-to-face meetings and done the individual task. The task represent only some familiarity with course contents and additional reading materials.

1= The student has participated in some face-to-face meetings and done the individual task. The task is related to the course contents and some additional reading material has been used.

**Arviointiasteikko:**

0-5

**Vastuuhenkilö:**

Essi Vuopala

**Työelämäyhteistyö:**

The course is tightly connected to the current work of researchers in the LET research unit. During the course students get practical information, ideas and real examples of research work in the field of learning sciences.

**Lisätiedot:**

The specific contents and lecturers of this course will vary between academic years.

**413321S: Problem-solving case 2, 10 op**

**Voimassaolo:** 01.08.2017 -

**Opiskelumoto:** Syventävät opinnot

**Laji:** Opintojakso

**Vastuuyksikkö:** Kasvatustieteiden tiedekunta

**Arvostelu:** 1 - 5, hyv, hyl

**Opintokohteen kielet:** englanti

**Laajuus:**

5 op

**Opetuskieli:**

English

**Ajoitus:**

2<sup>nd</sup> year, 1<sup>st</sup> and 2<sup>nd</sup> period

**Osaamistavoitteet:**

After completion of this course, the student is able to

- Utilize theoretical knowledge of learning sciences when scripting technology-enhanced learning
- Design educational product(s) by using Design Based Research (DBR)
- Work efficiently in a multidisciplinary team to create learning tools and environments or other educational products

**Sisältö:**

- Multidisciplinary project work
- Design Based Research
- Pedagogical and technological design
- Design of educational product

**Järjestämistapa:**

- Mode of delivery is blended learning which consists of flipped Classroom Introductory materials (online) 8h, (Technology) workshops (computer class, face-to-face), 32, and Online, individual and collaborative learning (blended), 95h

**Toteutustavat:**

- Lectures and other learning activities that consist mainly of individual and collaborative problem solving activities supported with technology. Students will work in teams to design & develop theoretically and empirically valid educational product(s).

**Kohderyhmä:**

LET 2nd year students

**Esitietovaatimukset:**

418026P Problem Solving Case 1

**Yhteydet muihin opintojaksoihin:**

[407061A](#) Open Workshop (5 credits)

**Oppimateriaali:**

Contemporary readings in the field of learning and educational technology, to be announced in the beginning of the course. Key literature related to one's own project will be defined in the beginning of the course.

**Suoritustavat ja arviointikriteerit:**

5: All course assignments are comprehensive in terms of the contents of the course, and they represent very deep and wide familiarity with course materials, environments and technologies. The student is able to express that he has understood and is able to combine technological tools and theories of learning sciences. Learning assignments are reflective in nature. The student participates very actively in group work, and contributes to the group assignments. Individual products represent very deep knowledge and are an exceptional contribution to the field of the learning environments and technologies.

4: All course assignments are comprehensive in terms of the contents of the course, and they represent good familiarity with course materials, environments and technologies. The student is able to express that s/he has understood and is able to combine technological tools and theories of learning sciences. The student participates very actively in a group work, and contributes to the group assignments. Individual products represent deep knowledge and are a very contribution to the field of the learning environments and technologies.

3: All course assignments are comprehensive in terms of the main contents of the course, and they represent familiarity with course materials, environments and technologies. The student is able to express that s/he has understood the key concepts and theories of learning sciences in the context of learning environments and technologies. The student participates actively in group work, and contributes to the group assignments. Individual products represent good knowledge and are a good contribution to the field of the learning environments and technologies.

2: The student has done most of the course assignments, but they do not cover all the contents of the course and the use of course materials, environments and technologies is mostly superficial. The student is able to express his understanding about some of the key concepts and theories in learning sciences in the context of learning environments and technologies. S/he participates in most of the group meetings, but his or her contribution to the group activities is not clearly indicated. Individual products represent mostly superficial expertise and are not a clear contribution to the field of the learning environments and technologies.

1: The student has not done all the course assignments or the assignments are superficial in terms of the main course contents and the use of course materials, environments and technologies. The student is able to express his understanding of a few concepts and theories of the learning sciences in the context of learning environments and technologies, but on a very superficial level. The student's participation in group work is passive, and his or her contribution to the group activities is not clearly indicated. S/he participates in most of the group meetings, but his/her contribution to the group activities is not clearly indicated. Individual products represent superficial expertise and do not contribute to the field of the learning environments and technologies.

**Arviointiasteikko:**

0-5

**Vastuhenkilö:**

Niina Impiö

**Työelämäyhteistyö:**

In this course students design and develop an educational product in a product development team. Course design simulates working life requirements and conditions.

**Lisätiedot:**

This course can be arranged together with multidisciplinary product development laboratories / projects which simulate real-life work contexts.

**413322S: Entrepreneurship in education, 5 op****Voimassaolo:** 01.08.2017 -**Opiskelumuoto:** Syventävät opinnot**Laji:** Opintojakso**Vastuuyksikkö:** Kasvatustieteiden tiedekunta**Arvostelu:** 1 - 5, hyv, hyl**Opettajat:** Niina Impiö**Opintokohteen kielet:** englanti**Laajuus:**

5 op

**Opetuskieli:**

English

**Ajoitus:**2<sup>nd</sup> year 3<sup>rd</sup> period**Osaamistavoitteet:**

After completion of this course, the student is able to

- define the key concepts related to entrepreneurship and entrepreneurship education
- connect entrepreneurship education to the theoretical perspectives of learning sciences and technology-enhanced learning
- identify and evaluate their own entrepreneurial competences
- recognize the potential and opportunities for educational entrepreneurship
- recognize the possibilities for supporting entrepreneurial competences in different educational settings

**Sisältö:**

- Entrepreneurial competences and recognizing one's own expertise and potential
- Different perspectives and key concepts of entrepreneurship in education
- Educational experts as entrepreneurs
- Educators and teachers as promoters of entrepreneurial competences

**Järjestämistapa:**

Face-to-face: 10h lecture

Individual: 125h

**Toteutustavat:**

Course consists mainly of web-based studying both individually and collaboratively. Learning activities includes watching video-clips, participating in group discussions and other collaborative activities, and doing individual assignments.

**Kohderyhmä:**

2nd year LET Master's Degree students

**Yhteydet muihin opintojaksoihin:**

Possibility to include more advanced studies on the theme to the optional studies in the student's personal study plan.

**Suoritustavat ja arviointikriteerit:**

Criteria for passing the course: The student participates actively in all the learning activities both face-to-face and online. The student participates in collaborative activities, and is able to contribute to the group task significantly. His or her contribution indicates good familiarity with the learning materials. The student has accomplished all individual tasks.

Criteria for failing the course: The student is passive or absent from face-to-face meetings and online activities. The student participates infrequently in collaborative activities, and his/her contribution to the group task is minor. S/he has not accomplished all individual tasks, and s/he cannot prove his or her familiarity with the learning materials of the course.

**Arviointiasteikko:**

pass/fail

**Vastuhenkilö:**

Niina Impiö

**Työelämäyhteistyö:**

The course is implemented in cooperation with different experts and organizations in and outside of the university.

**408531S: Qualitative Research, 5 op**

**Voimassaolo:** 01.08.2018 -

**Opiskelumuoto:** Syventävät opinnot

**Laji:** Opintojakso

**Vastuuyksikkö:** Kasvatustieteiden tiedekunta

**Arvostelu:** 1 - 5, hyv, hyl

**Opettajat:** Katri Jokikokko

**Opintokohteen kielet:** englanti

**Laajuus:**

5 ECTS

**Opetuskieli:**

English

**Ajoitus:**

1st year, 3rd and 4th periods (LET and EDGLO students)

**Osaamistavoitteet:**

Having completed the course, the student

- knows how to describe and interpret qualitative data analysis methods used in education and psychology and their background
- knows how to analyse and interpret typical educational and psychological research data
- knows how to assess the credibility, reliability and ethicality of her/his own research and research done by others

**LET STUDENTS:**

After completion of this course, the student is able to

- process and analyse qualitative data
- describe and report on results based on qualitative research data
- utilize mixed method approach
- evaluate the ethicality and reliability of qualitative research

**Sisältö:**

- the meaning of different paradigms and research traditions in the planning and implementation of qualitative research
- different reading methods in the analysis and interpretation of qualitative research data
- proving credibility in qualitative research
- research reporting in qualitative research
- ethical issues in qualitative research

**LET STUDENTS:**

- Basic and central concepts of qualitative research
- Process oriented research methods
- Mixed method approach
- Writing a research publication

**Järjestämistapa:**

Face-to-face teaching (and possibly blended-learning)

**LET STUDENTS:**

Face-to-face and online teaching, 40h: 18h lectures, 22h practice

Online, individual and collaborative learning, 95h

**Toteutustavat:**

Lectures 18h, small group sessions 16h, independent work approx. 100h

**LET STUDENTS:**

- Learning activities consist of active participation in face-to-face meetings where researchers in the field of learning science and educational technology introduce various topics related to qualitative research.
- Each presentation includes an online task for the students.
- In addition to researchers' presentations there will be seminars where the students are able to apply their research knowledge in practice.

In addition, the students reflect on their own learning and expertise in a digital portfolio.

#### **Kohderyhmä:**

1st year students on the LET and EDGLO Master's Programmes

#### **Esitietovaatimukset:**

Basic course in qualitative research, 5 credits, or an equivalent course

#### **Yhteydet muihin opintojaksoihin:**

The study module is a part of the advanced studies and supports the writing of a Master's thesis

#### **Oppimateriaali:**

Heikkinen, H. L. T., Rovio, E. & Syrjälä, L. (toim. ) (2007) Toiminnasta tietoon. Toimintatutkimuksen menetelmät ja lähestymistavat.

OR

Lappalainen, S. Hynninen, P. Kankkunen, T. Lahelma, E. & Tolonen. T. (2007) Etnografia metodologiana. Lähtökohtana koulutuksen tutkimus.

OR

Lichtman, M. (2012) Qualitative Research in Education. A User's Guide.

OR

Creswell, J. W. (ed.) (2006) Qualitative Inquiry and Research Design: Choosing Among Five Approaches (revised edition)

#### **LET STUDENTS:**

American Psychological Association: Publication Manual of the American Psychological Association. (2009). 6th edition

Given, L. M. (Ed.) (2008) The Sage Encyclopedia of qualitative research. Volumes 1 & 2. <http://www.stiba-malang.com/uploadbank/pustaka/RM/QUALITATIVE%20METHOD%20SAGE%20ENCY.pdf>

and/or other contemporary readings in the field of learning and educational technology, to be announced in the beginning of the course.

#### **Suoritustavat ja arviointikriteerit:**

Exam, active participation in small group sessions, an essay

Read more about [assessment criteria](#) at the University of Oulu webpage.

#### **LET STUDENTS:**

Completion of the course requires active participation in face-to-face teaching and successful completion of all individual learning tasks:

5: The student has participated actively in all face-to-face meetings and done all required individual tasks according to the course requirements. All tasks represent very good familiarity with course contents, course materials, and additional materials. The student is able to express deep understanding of core course contents in the digital portfolio.

4: The student has participated actively in all face-to-face meetings and done all required individual tasks according to the course requirements. All tasks represent good familiarity with course contents and course materials. The student is able to express understanding of core course contents in the digital portfolio.

3: The student has participated actively in most of the face-to-face meetings and done all required individual tasks. Tasks mostly represent good familiarity with course contents and core course materials. The student is able to express understanding of core course contents in the digital portfolio.

2: The student has participated in several face-to-face meetings and done individual tasks, but there are a few tasks missing. Tasks are done mostly based on one's own experiences and opinions, not on course literature and other course materials. Reflection of one's own learning in the digital portfolio is mostly superficial.

1: The student has been passive in face-to-face meetings, and there are assignments missing or they represent superficial understanding of the course content. The student is able to express the understanding of some course content either in the digital portfolio or in individual tasks, but the level of reflection is superficial and irrelevant, and it does not represent familiarity with the course materials.

#### **Arviointiasteikko:**

0 - 5

#### **Vastuuhenkilö:**

LET Studies: Essi Vuopala  
EDGLO Studies: Jokikokko Katri

**Työelämäyhteistyö:**

The alternative methods to complete the course can involve worklife cooperation.

**408532S: Quantitative Research, 5 op**

**Voimassaolo:** 01.08.2018 -

**Opiskelumuoto:** Syventävät opinnot

**Laji:** Opintojakso

**Vastuuyksikkö:** Kasvatustieteiden tiedekunta

**Arvostelu:** 1 - 5, hyv, hyl

**Opettajat:** Peltonen, Jouni Aslak

**Opintokohteen kielet:** englanti

**Laajuus:**

5 ECTS

**Opetuskieli:**

English

**Osaamistavoitteet:**

Having completed the course, the student

- knows how to analyse and interpret typical educational and psychological quantitative research data by using research methods designed for the examination of one-, two- or more dimensional distributions
- knows how to describe the basic ideas of research data analysis based on structural equation modelling and how to interpret models created by others
- knows how to assess the credibility, reliability and ethicality of her/his own research and research done by others

**Sisältö:**

- statistical testing
- classic multivariate methods
- modelling by means of linear structural equations
- publishing the results of statistical methods of analysis in a research report

**Järjestämistapa:**

Face-to-face teaching (and possibly blended-learning)

**Toteutustavat:**

Lectures 18h, small group sessions 14h, independent work app. 100h

**Kohderyhmä:**

Students pursuing advanced studies in the Faculty of Education

**Esitietovaatimukset:**

Basic course in quantitative research 5 cr. or equivalent studies in statistics

**Yhteydet muihin opintoihin:**

The study module is part of the advanced studies in the education programme and supports the writing of a Master's Thesis

**Oppimateriaali:**

Metsämuuronen, J. (2003 or later edition) Tutkimuksen tekemisen perusteet ihmistieteissä (pages 273-764)

OR

Kerlinger, F. & Lee, H. (2003 or later edition) Foundations of behavioral research. Fourth edition.

OR

Hair, J.F., Anderson, R.E, Tatham, R.L. & Black, W.C. (1998 or later edition) Multivariate data analysis.

**Suoritustavat ja arviointikriteerit:**

The students carry out, either independently or in small groups, assignments of analyzing quantitative data, in which the basis and materials are provided by the lectures, literature and other sources whenever

possible (such as recordings of expert lectures). In concrete terms, a learning assignments can consist, for instance, of the analysis of data collected for the student's own thesis, or of sample data used in the course. By agreement, the course can also be arranged and carried out in other ways, such as by taking part in the activities of a research group in the faculty.

The student's course performance is

0 = unfinished and fragmented, with no concretization of the basic principles of analyzing quantitative research data

1 = highly superficial, the analysis is very superficial and contains lots of mistaken interpretations and erroneous conclusions

2 = superficial, the analysis is superficial and contains some mistaken interpretations and erroneous conclusions

3 = reflective. the analysis is justified and the results do not reveal many mistaken interpretations or erroneous conclusions

4 = an analytical and partly very successful whole, in which the proper methods of analysis were chosen for each situation, the student knew how to interpret the results mainly right without any significant erroneous conclusions

5 = a systematic and analytical whole, in which the proper methods were chosen for each situation, the student knew how to interpret the result correctly without any erroneous conclusions

Read more about [assessment criteria](#) at the University of Oulu webpage.

**Arviointiasteikko:**

0 - 5

**Vastuuhenkilö:**

Jouni Peltonen

**408043S: Pro gradu -tutkielma, 30 op**

**Voimassaolo:** 01.08.2015 -

**Opiskelumuoto:** Syventävät opinnot

**Laji:** Lopputyö

**Vastuuyksikkö:** Kasvatustieteiden tiedekunta

**Arvostelu:** 1 - 5, hyv, hyl

**Opintokohteen kielet:** suomi

**Voidaan suorittaa useasti:** Kyllä

**Lisätiedot:**

"ks. tiedot 408044S Graduseminaari"

**408044S: Graduseminaari, 5 op**

**Voimassaolo:** 01.08.2015 -

**Opiskelumuoto:** Syventävät opinnot

**Laji:** Opintojakso

**Vastuuyksikkö:** Kasvatustieteiden tiedekunta

**Arvostelu:** 1 - 5, hyv, hyl

**Opintokohteen kielet:** suomi

**Laajuus:**

5 op seminaari + 30 op tutkielma

**Opetuskieli:**

Suomi ja englanti (varsinkin ITE-ohjelmassa)

**Ajoitus:**

4.-5. vuosi

**Osaamistavoitteet:**

Opiskelija



- harjaantuu käyttämään tieteenalansa peruskäsitteistöä ja osaa määrittää ja analysoida tieteenalansa keskeisimpiä tutkimustuloksia ja arvioida niitä suhteessa omaan tutkimukseen,
- hallitsee valitsemaansa tutkimusmenetelmät sekä osaa kuvata kasvatus- ja yhteiskuntatieteiden, erityisesti kasvatustieteen ja kasvatopsykologian tieteenperinteitä,
- osaa laatia yksin, parityönä tai ryhmässä kasvatustieteellisen tutkielman, joka osoittaa perehtyneisyyttä tutkielman aihepiiriin sekä osoittaa valmiutta tieteelliseen ajatteluun,
- osaa arvioida toisten tekemiä tutkielmia sekä osaa osallistua tieteelliseen keskusteluun ja puolustaa omaa tutkielmaa

#### **Sisältö:**

Opintojakson ydinsisältö ja keskeiset teemat luettelomuodossa ( 5 op seminaarityöskentely ja 30 op oman tutkielman kirjoittaminen):

1. Oman tutkimussuunnitelman laadinta ja esittely seminaarissa
2. Kansainvälisen (tai kotimaisen) referee-artikkelin, joka liittyy omaa tutkielmaan, esittely seminaarissa (sovitaan ohjaajan kanssa)
3. Oman tutkimuksen välivaiheen esittely (esimerkiksi metodologiset ratkaisut / analyysin perusteet - sovitaan ohjaajan kanssa)
4. Pro gradututkielman esittely ja opponointiin vastaaminen
5. Toisen opiskelijan tutkielman opponointi
6. Muu aktiivinen seminaarityöskentely
7. Oman tutkielman viimeistely

#### **Järjestämistapa:**

Seminaari ja ohjaajan kanssa sovittavat ohjaustapaamiset

#### **Toteutustavat:**

Seminaarit ja ohjaus

#### **Kohderyhmä:**

Kasvatustieteiden tiedekunnan opiskelijat

#### **Oppimateriaali:**

Sovitaan opintojakson alussa.

#### **Suoritustavat ja arviointikriteerit:**

Suoritus: Aktiivinen osallistuminen seminaareihin, itsenäisten tehtävien tekeminen ja seminaariin kuuluvien tehtävien suorittaminen hyväksytysti (5 op.) Keskeinen suoritus on pro gradu -tutkielma (30 op.), johon on omat kriteerit tiedekunnan www-sivulla <http://www.oulu.fi/ktk/opinnaytetyot>.

#### **Arviointiasteikko:**

0 – 5

Arviointikriteerit tiedekunnan www-sivulla <http://www.oulu.fi/ktk/opinnaytetyot>.

#### **Vastuuhenkilö:**

Hannu Heikkinen ja graduryhmien vetäjät

### **408045S: Tiivistelmä/ maturiteetti, 0 op**

**Voimassaolo:** 01.08.2015 -

**Opiskelumuoto:** Syventävät opinnot

**Laji:** Opintojakso

**Vastuuyksikkö:** Kasvatustieteiden tiedekunta

**Arvostelu:** 1 - 5, hyv, hyl

**Opintokohteen kielet:** suomi

### **A255301: Learning, Education and Technology, 25 op**

**Opiskelumuoto:** Perusopinnot

**Laji:** Kokonaisuus

**Vastuuyksikkö:** Kasvatustieteiden tiedekunta

**Arvostelu:** 1 - 5, hyv, hyl

**Opettajat:** Järvelä Sanna

**Opintokohteen kielet:** suomi

**Laajuus:**

25 op

**Opetuskieli:**

English

**Ajoitus:**

1.-5. vuosi

**Osaamistavoitteet:**

Minor subject studies (25 ects) set up the foundations for the studies in Learning, Education and Technology. The studies are also open for other bachelor and master level students interested in developing their expertise in the contents of learning and educational technology.

In this programme, the students pursue their studies as a part of a multicultural group to learn the basics of learning sciences and technology-enhanced learning. One of the aims is to know how to apply this theoretical knowledge in different educational settings in a strong connection to working life. Collaboration, self-regulation and technology-enhanced learning are key elements of the minor studies both in theory and in practise.

After completion of the introductory studies in Learning, Education and Technology (25 ects), the student is able to

- define and explain the key concepts and theories related to learning sciences, especially self-regulated learning, collaborative learning, and technology-enhanced learning
- apply their theoretical knowledge of learning in different educational contexts
- use emerging technologies as teaching and learning tools, and justify their use based on current scientific knowledge about learning
- work efficiently in teams

**Sisältö:**

- Collaborative learning and problem-solving
- Self-regulated learning
- Technology-enhanced learning
- Learning environments and technologies
- Using theoretical knowledge of learning for real educational cases

**Järjestämistapa:**

Face-to-face and online teaching

**Toteutustavat:**

The studies in educational technology focus on self-direction, collaborative knowledge construction and approaches surpassing science boundaries. Both face-to-face and online working methods are used, including small group sessions, self-study, lectures, expert sessions, discussions and workshops.

**Kohderyhmä:**

Minor subject students in Learning, Education and Technology

Master's programme students in Learning, Education and Technology

**Oppimateriaali:**

The learning materials to be used in the courses are evaluated and selected annually. The materials represent both the most central theoretical background in the field and its most recent scientific research. The students choose some of the materials themselves depending on the content of the learning assignments.

**Arviointiasteikko:**

hyv/hyl

**Vastuhenkilö:**

Sanna Järvelä

**Työelämäyhteistyö:**

Yes

*Pakollisuus*

#### **418023P: Oppimisen perusteet, 5 op**

**Voimassaolo:** 01.08.2017 -

**Opiskelumuoto:** Perusopinnot

**Laji:** Opintojakso

**Vastuuyksikkö:** Kasvatustieteiden tiedekunta

**Arvostelu:** 1 - 5, hyv, hyl

**Opettajat:** Essi Vuopala

**Opintokohteen kielet:** englanti

**Laajuus:**

5 cr

**Opetuskieli:**

English

**Ajoitus:**1<sup>st</sup> year, 1<sup>st</sup> period**Osaamistavoitteet:**

After completion of this course, the student is able to

- describe the basic concepts of learning sciences,
- name the main theories in learning and instruction,
- explain educational use of technology over time, and work in various multicultural groups.

**Sisältö:**

- Basic concepts and theories of learning and instruction
- Introduction to how people learn individually and in groups
- History and current trends of technology-enhanced learning

**Järjestämistapa:**

Learning activities include both individual and collaborative studying supported by technology. There will also be lectures and short expert presentations by the teachers and researchers in the field of learning sciences.

**Toteutustavat:**

Face-to-face and online teaching, 40h: lectures 15, practice 25

Individual and collaborative studies, 95h

**Kohderyhmä:**

1st year students on the LET Master's Programme

**Oppimateriaali:**

- [How People Learn: Brain, Mind, Experience, and School: Expanded Edition. \(2000\). Washington, DC: The National Academies Press.](#)
- The Cambridge Handbook of The Learning Sciences. (2006). New York: Cambridge University Press.
- and/or other contemporary readings in the field of learning and educational technology, to be announced at the beginning of the course.

**Suoritustavat ja arviointikriteerit:**

Completion of the course requires active participation in face-to-face teaching, and collaborative and independent work. It also requires successful completion of all the learning assignments and exercises. Learning outcomes are assessed through group and individual assignments.

5: All course assignments are comprehensive in terms of the contents of the course, and they represent very deep and wide familiarity with course materials. The student is able to express that s/he has understood and is able to combine key concepts and theories of learning sciences. The learning assignments are reflective in nature. The student participates very actively in group work, and contributes to the group assignments.

4: All course assignments are comprehensive in terms of the contents of the course, and they represent good familiarity with course materials. The student is able to express that he has understood and is able to combine key concepts and theories of learning sciences. S/he participates actively in group work, and contributes to the group assignments.

3: All course assignments are comprehensive in terms of the main contents of the course, and they represent familiarity with course materials. The student is able to express that s/he has understood the key concepts and theories of learning sciences. S/he participates very actively in group work, and contributes to the group assignments.

2: The student has done most course assignments, but they do not cover all contents of the course and the use of course materials is mostly superficial. The student is able to express his understanding about some of the key concepts and theories in learning sciences. S/he participates in most of the group meetings, but his contribution to the group activities is not clearly indicated.

1: The student hasn't done all course assignments or the assignments are superficial in terms of the main course contents and the use of course materials. S/he is able to express his understanding of a few concepts and theories in the field of learning sciences, but on a very superficial level. The student's participation in group work is passive, and his/her contribution to the group activities is not clearly indicated.

**Arviointiasteikko:**

0-5

**Vastuhenkilö:**

Essi Vuopala

**Työelämäyhteistyö:**

Group tasks are case examples from actual working life.

**418024P: Itsesäätöinen oppiminen, 5 op****Voimassaolo:** 01.08.2017 -**Opiskelumuoto:** Perusopinnot**Laji:** Opintojakso**Vastuuyksikkö:** Kasvatustieteiden tiedekunta**Arvostelu:** 1 - 5, hyv, hyl**Opintokohteen kielet:** englanti**Laajuus:**

5 op

**Opetuskieli:**

English

**Ajoitus:**1<sup>st</sup> year, 2<sup>nd</sup> period**Osaamistavoitteet:**

After completion of this course, the student is able to

- define the concept of self-regulated learning
- identify the phases of self-regulated learning in different theoretical models
- recognize the role of motivation and emotions in learning
- define the concept of metacognition and explain its role in learning
- apply the basic principles of self-regulated learning to their own studying

**Sisältö:**

- The concept of self-regulated learning
- Theoretical models of self-regulated learning
- The role of motivation, emotions, cognition and metacognition in learning

**Järjestämistapa:**

Learning activities consist of lectures and structured individual studying. The students develop their own self-regulatory skills during the course.

**Toteutustavat:**

Face-to-face and online teaching 30h: lectures 10h, practice 20h.

Individual and online studying, 105h.

**Kohderyhmä:**

1st year students on the LET Master's Programme and students in minor subject studies in learning and educational technology.

**Oppimateriaali:**Zimmerman, B. J., & Schunk, D. H. (Eds.). (2001). *Self-regulated learning and academic achievement: Theoretical perspectives*. Routledge.Zimmerman, B. J. (2008). Investigating self-regulation and motivation: Historical background, methodological developments, and future prospects. *American Educational Research Journal*, 45(1), 166–183. DOI: 10.3102/0002831207312909.

And/or other contemporary readings in the field of self-regulated learning, to be announced in the beginning of the course.

**Suoritustavat ja arviointikriteerit:**

Completion of the course requires active participation in face-to-face teaching and independent work. It also requires successful completion of all the learning assignments and exercises. Learning outcomes are assessed through participation and the quality of the individual assignments.

5: All course assignments are comprehensive in terms of the contents of the course, and they represent very deep and wide familiarity with course materials. The student is able to express that s/he has understood and is able to combine key concepts and theories of self-regulated learning. Learning assignments are reflective in nature.

4: All course assignments are comprehensive in terms of the contents of the course, and they represent a good familiarity with course materials. The student is able to express that s/e has understood and is able to combine key concepts and theories of self-regulated learning.

3: All course assignments are comprehensive in terms of the main contents of the course, and they represent familiarity with course materials. The student is able to express that s/he has understood the key concepts and theories of self-regulated learning.

2: The student has done most course assignments, but they do not cover all the contents of the course and the use of course materials is mostly superficial. The student is able to express his/her understanding of some of the key concepts and theories in self-regulated learning.

1: The student has done some of the course assignments but the assignments are superficial in terms of the main course contents and the use of course materials. The student is able to express his understanding of a few concepts and theories in the field of self-regulated learning, but on a very superficial level.

**Arviointiasteikko:**

0-5

**Vastuuhenkilö:**

Jonna Malmberg

**418025P: Oppimisen ympäristöt ja teknologiat, 5 op**

**Voimassaolo:** 01.08.2017 -

**Opiskelumuoto:** Perusopinnot

**Laji:** Opintojakso

**Vastuuyksikkö:** Kasvatustieteiden tiedekunta

**Arvostelu:** 1 - 5, hyv, hyl

**Opettajat:** Jari Laru

**Opintokohteen kielet:** englanti

**Laajuus:**

5 op

**Opetuskieli:**

English

**Ajoitus:**

1st year, 1st and 2nd period

**Osaamistavoitteet:**

After completion of this course, the student is able to

- apply theoretical ideas of learning sciences to the context of emerging technologies,
- use emerging technologies as teaching and learning tools,
- set-up a Personal Learning Environment (PLE) or Personal Teaching Environment (PTE),
- apply the PLE/PTE in educational context, and
- work in technology-rich teaching and learning environments as administrator, teacher or student.

**Sisältö:**

- Basic concepts and ideas of how to use technology for problem-solving, reflection, sharing and collaboration.
- Basic concepts and ideas of using technological tools and environments for technology-enhanced learning, such as a) learning management systems, cloud computing, and social media, b) production and distribution of digital media, and c) classroom infrastructure and wireless Internet devices.
- Future and trends in technology-enhanced learning

- Design and setup of personal learning environment or personal teaching environment and digital portfolio.

#### Järjestämistapa:

- Mode of delivery is blended learning which consists of Flipped classroom (online), 8h, Technology workshops (computer class, face-to-face) 32h, online, individual and collaborative learning (blended) 95h.

#### Toteutustavat:

Learning activities include hands-on workshops with classroom infrastructure, wireless internet learning devices and software. There will also be flipped classroom phases where topics and/or technologies are presented before the actual workshop.

In this course students design their own personal learning and/ or teaching environment which is a collection of tools for supporting their learning activities. In addition to that, students also design and set up their individual digital portfolios where they also reflect on their course tasks and their own learning.

#### Kohderyhmä:

1st year students on the LET Master's Programme and students in minor subject studies in learning and educational technology.

#### Yhteydet muihin opintojaksoihin:

[407061A](#) Open workshop (5 credits)

#### Oppimateriaali:

Fischer, F., Wild, F., Sutherland, R., & Zirn, L. (2014). *Grand Challenges in Technology Enhanced Learning: Outcomes of the 3rd Alpine Rendez-Vous*. Springer International Publishing.

Laru, J., Naykki, P., & Jarvela, S. (2015). Four stages of research on the educational use of ubiquitous computing. *Learning Technologies, IEEE Transactions on*, 8(1), 69-82.

Pea, R. D., & Maldonado, H. (2006). WILD for learning: Interacting through new computing devices anytime, anywhere. *The Cambridge handbook of the learning sciences*, 852-886.

#### Suoritustavat ja arviointikriteerit:

Completion of the course requires active participation in face-to-face teaching, and collaborative and independent work. It also requires successful completion of all the learning assignments and exercises, and writing posts for their personal digital portfolios.

Learning outcomes are assessed through group and individual assignments.

5: All course assignments are comprehensive in terms of the contents of the course, and they represent very deep and wide familiarity with course materials, environments and technologies. The student is able to express that he has understood and is able to combine technological tools and theories of learning sciences. Learning assignments are reflective in nature. The student participates very actively in group work, and contributes to the group assignments. Individual products represent very deep knowledge and are an exceptional contribution to the field of the learning environments and technologies.

4: All course assignments are comprehensive in terms of the contents of the course, and they represent good familiarity with course materials, environments and technologies. The student is able to express that he has understood and is able to combine technological tools and theories of learning sciences. A student participates very actively in a group work, and contributes to the group assignments. Individual products represent deep knowledge and are very contribution to the field of the learning environments and technologies.

3: All course assignments are comprehensive in terms of the main contents of the course, and they represent familiarity with course materials, environments and technologies. The student is able to express that he has understood the key concepts and theories of learning sciences in the context of learning environments and technologies. The student participates actively in group work, and contributes to the group assignments. Individual products represent good knowledge and are a good contribution to the field of the learning environments and technologies.

2: The student has done most course assignments, but they do not cover all the contents of the course and the use of course materials, environments and technologies is mostly superficial. The student is able to express his understanding of some of the key concepts and theories in learning sciences in the context of learning environments and technologies. S/he participates in most of the group meetings, but his contribution to the group activities is not clearly indicated. Individual products represent mostly superficial expertise and are not a clear contribution to the field of the learning environments and technologies.

1: The student has not done all the course assignments or the assignments are superficial in terms of the main course contents and the use of course materials, environments and technologies. The student is able to express his or her understanding of a few concepts and theories of the learning sciences in the context of learning environments and technologies, but on a very superficial level. Her/his participation in group work is passive, and his contribution to the group activities is not clearly indicated. S/he participates in most of the group meetings, but his contribution to the group activities is not clearly indicated. Individual products

represent superficial expertise and do not contribute to the field of the learning environments and technologies.

**Arviointiasteikko:**

0-5

**Vastuuhenkilö:**

Jari Laru

**Työelämäyhteistyö:**

- 1) Course participants will use online professional development communities and networks as a support function for their learning activities.
- 2) Technology choices in these course reflect the socio-technical context in the average workplace of an educational expert.

**418026P: Ongelmanratkaisutyöskentely 1, 10 op**

**Voimassaolo:** 01.08.2017 -

**Opiskelumuoto:** Perusopinnot

**Laji:** Opintojakso

**Vastuuyksikkö:** Kasvatustieteiden tiedekunta

**Arvostelu:** 1 - 5, hyv, hyl

**Opettajat:** Essi Vuopala

**Opintokohteen kielet:** englanti

**Laajuus:**

10 op

**Opetuskieli:**

English

**Ajoitus:**

1st year periods 3 and 4

**Osaamistavoitteet:**

After completion of this course, the student is able to

- Utilize theoretical knowledge in authentic educational challenges.
- Design technology-enhanced learning (courses, projects, products etc.)
- Work efficiently in a team to solve a problem and/or create a learning design

**Sisältö:**

- Basics of project work
- Designing technology-enhanced teaching and learning
- Pedagogical and technological decisions in authentic educational settings
- Collaborative problem solving

**Järjestämistapa:**

Face-to-face and online teaching 50h: lectures 10h, practice 40h.  
Individual, collaborative and on-line studying, 220h.

**Toteutustavat:**

In this course the students work on an educational project or case for a local company, school or other organization. The students design, implement and report on the project in a project team under the teacher's guidance. They learn about project work in theory and practice.

**Kohderyhmä:**

1st year students on the LET Master's Programme and students in minor subject studies in learning and educational technology.

**Yhteydet muihin opintojaksoihin:**

(418025P) Tools and Environments for Learning

(413312S) Collaborative Learning

(418024P) Self-regulated Learning

**Oppimateriaali:**

Key literature related to one's own project is defined in the beginning of the course.

**Suoritustavat ja arviointikriteerit:**

Criteria for passing the course:

The student is able to work responsibly as a part of the group to successfully complete the project in hand. The student is able to utilize theoretical knowledge of learning and his/her technological skills to advance the group work. The individual student is able to show and reflect on his/her individual learning during the teamwork through the reflective assignments given by the teacher, and express his or her developing expertise in the field of learning and educational technology.

Criteria for failing the course:

The student is not able to work in a group or utilize his/her skills and knowledge for collaboration and problem-solving. The reflective assignments do not express learning or expertise in the field of learning and educational technology.

**Arviointiasteikko:**

pass/fail

**Vastuhenkilö:**

Essi Vuopala

**Työelämäyhteistyö:**

The course is implemented in collaboration with local or global organizations in the field of education.