Opasraportti

FMed - Health Science Teacher, MHSc (2020 - 2021)

University's new study guide for academic year 2020-2021 is published at https://opas.peppi.oulu.fi

The study guide includes information on degrees, curriculums, courses and course timetables. Course registrations are still done in Oodi.

If you have questions on information in the study guide, please contact the study field's Academic Affairs Service Team https://www.oulu.fi/forstudents/faculty-study-affairs

MASTER'S PROGRAMME IN HEALTH SCIENCES TEACHER EDUCATION MASTER OF HEALTH SCIENCES, 120 ECTS cr, 2020 – 2021

Description

Nursing science didactics studies, theorizes and develops teaching and learning of nursing. Connection of learning and teaching with health and health concept is central. Master's Degree in Health Sciences Teacher Education focuses on nursing science as major. It is based on research in nursing science and didactics and is connected to practices of evidence-based nursing, nursing education and nursing leadership.

Studies in the Master's Programme in Health Sciences Teacher Education (120 ECTS credits) consist of the following: advanced studies in nursing science, research methodology studies, pedagogical studies, and minor subject studies. The aim of the studies is to start the development of pedagogical expertise. Pedagogical studies focus on teacher growth, on being and acting as a teacher and on the teacher's work on a large scale.

The degrees of Master's in Health Sciences include a minimum of 60 ECTS or of pedagogical studies in accordance with the Government Decree on University Degrees (794/2004), which provides the qualification indicated in the law (986/1998) regarding qualification criteria for personnel in the various offices of teaching.

Learning outcomes

Upon completion of the Master's Degree in Health Sciences Teacher Education, students will have reached the following learning objectives:

Competence in nursing science and development of evidence-based practices: The student is

- familiar with and able to apply the concepts, theories, research methods and evidence specific to nursing science, nursing science didactics, and other related sciences, and innovatively apply these into work as experts in healthcare and education;
- able to develop and renew the field of nursing science, as well as the necessary competence needed in social and healthcare, and able to develop evidence-based practice by producing, utilizing, and evaluating research evidence:
- able to continuously evaluate their own learning and develop their competence;
- able to achieve the ability to conduct research and to continue further academic education.

Pedagogical competence: The student is able to

- work according to professional ethical principles and education policy:
- plan, implement and evaluate teaching, guidance and learning in social and healthcare in an evidence-based and work life-oriented manner;
- guide students in the development of their learning and competence while taking into consideration their individual needs in social and healthcare education and in different operational environments;
- solve demanding challenges using analytical thinking and evidence-based knowledge in social and healthcare in research, management and innovation;
- evaluate and develop social and healthcare education, the educational system, and curricula, in addition to professional practice and the practices and competence of students;
- creatively use various technical and digital solutions in education, communication and in collaborative work together with students, colleagues and partners.

Competence in networking, communication and internationalism: The student is able to

- work independently and collaboratively while utilising the expertise of different professions, and utilising networks that support teachers in the completion of assignments related to teaching, education, and expert work:
- operate and communicate flexibly in rapidly changing, multidisciplinary, regional, national and international networks, and in learning and work communities, while taking into account collaborative, ethical and legal perspectives in addition to the principles of sustainable development;
- identify and face cultural differences when working in national and international networks, learning and work communities.

Management, innovation and development skills: The student is able to

- identify and monitor and evaluate one's own competence and continuous development;
- lead and coordinate one's own and others' activities, evidence-based activities and various research, development and innovation projects in accordance with the principles of sustainable development;
- analyze, evaluate and develop activities creatively, taking into account the needs of society, in order to achieve common goals with social and health care workers and students:
- utilize the information needed in marketing, financial management and conducting business with a social impact in educational, research and expert positions in the social and health care sector.

Tutkintorakenteet

Master's Programme in Health Sciences Teacher Education, MHSc

Tutkintorakenteen tila: published

Lukuvuosi: 2020-21

Lukuvuoden alkamispäivämäärä: 01.08.2020

Advanced Studies in Nursing Science (60 op)

This ePSP structure is only meant for students who have been granted their study right according to the 2020-2021 curriculum.

Advanced Studies in Nursing Science, according to the 2020-2021 curriculum, are 60 ECTS credits in total (Nursing Science Studies 40 ECTS credits, Research Methodology Studies 20 ECTS credits).

A540303: Nursing Science, advanced studies, 60 - 87 op

Advanced Studies in Nursing Science

353301S: Nursing Science in the Field of Sciences, 5 op

353302S: Nursing Science Knowledge and Innovation in Evidence-Based Practice, 5 op

353317S: Generating Scientific Knowledge in Nursing Science, 5 op

353305S: Master's Thesis and Research Seminars, Nursing Science, 25 op

353205S: Written maturity test, 0 op

353316S: Research Methods in Nursing and Health Management Science, 5 op

353306S: Information Literacy and Data Analysis, 5 op

353307S: Planning and Conducting Scientific Research, 5 op

352252S: Methods of Statistical Analysis in Health Sciences, 5 op

Minor Subject Studies in Didactics of Nursing Science (35 op)

This ePSP structure is only meant for students who have been granted their study right according to the 2020-2021 curriculum.

Scope of course 352212A Digital Pedagogy (curriculum 2020-2021) is 5 ECTS credits.

A540304: Didactics in nursing science, 35 op

Minor Subject in Didactics of Nursing Science

353231A: Introduction to Health Pedagogy, 5 op

352230A: Pedagogical Processes and Teaching, 5 op

352212A: Digital pedagogy, 3 - 5 op

352236A: Leadership, Innovations and Networks in Education, 5 op

352237A: Teaching Practice Experience in an Educational Organisation, 10 op

352238A: Teaching Practice Experience in a Clinical Environment, 5 op

Minor Subject (25 op)

Basic Studies in Education 25 ECTS credits

Opintojaksojen kuvaukset

Tutkintorakenteisiin kuuluvien opintokohteiden kuvaukset

A540303: Nursing Science, advanced studies, 60 - 87 op

Opiskelumuoto: Advanced Studies

Laji: Study module

Vastuuyksikkö: Health Sciences

Arvostelu: 1 - 5, pass, fail
Opettajat: Pirjo Kaakinen
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

Advanced Studies in Nursing Science

353301S: Nursing Science in the Field of Sciences, 5 op

Voimassaolo: 01.08.2019 -

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Health Sciences

Arvostelu: 1 - 5, pass, fail

Opettajat: Pirjo Kaakinen

Opintokohteen kielet: Finnish

Leikkaavuudet:

ay353301S Nursing Science in the Field of Sciences (OPEN UNI) 5.0 op

ECTS Credits:

5 ECTS cr

Language of instruction:

Finnish

Timing:

Autumn term, 1st year, 1st period

Learning outcomes:

Upon completion of the course the student will be able to:

- orientate himself/herself towards the scientific community and academic learning
- describe the development of nursing science and trends in research, research priorities and topics, and theories
- discuss the significance of nursing science in social and healthcare
- analyse and evaluate their own and groups' development in expertise and continuous learning using the Action Model of Expertise (STM) along with nursing science evidence and concepts
- communicate efficiently in multidisciplinary, national and international learning and working communities while taking into consideration ethical and legal perspectives.

Contents:

Orientation to university studies and integration into the scientific community, development of nursing science, trends in research, research priorities and topics, significance of nursing science evidence in the development of expertise in social and healthcare.

Mode of delivery:

Blended teaching utilizing information and communications technology.

Learning activities and teaching methods:

Lectures/workshops 6 h (in Oulu). Seminar 6 h (in Oulu). Completion of an expert portfolio 18 h (distant learning). Independent and collaborative learning in the online learning environment 95 h (distant learning). Tutor teaching and orientation to the university 10 h (in Oulu).

Target group:

Students in the nursing science and health sciences teacher programmes

Recommended or required reading:

- Eriksson, K., Isola, A., Kyngäs, H., Leino-Kilpi, H., Lindström, U. Å., Paavilainen, E., Pietilä, A-M.,
 Salanterä, S., Vehviläinen-Julkunen, K. & Åstedt-Kurki, P. 2016. Hoitotiede. 4th edition. Sanoma Pro Ov. Helsinki.
- Lauri S & Kyngäs H. 2006. Hoitotieteen teorian kehittäminen. Sanoma Pro Oy.
- Journal of Nursing Science (Hoitotiede). Other current national and international literature.

Assessment methods and criteria:

Completion of an expert portfolio, collaborative assignments in the online learning environment. Self-assessment, peer assessment, and teacher assessment will be used during the final assessment. Read more about assessment criteria at the University of Oulu webpage.

Grading:

1 - 5 / fail

Person responsible:

University lecturer

Working life cooperation:

Work orientation: reflection upon personal competence in relation to the needs of working life.

353302S: Nursing Science Knowledge and Innovation in Evidence-Based Practice, 5 op

Voimassaolo: 01.08.2019 -

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Health Sciences

Arvostelu: 1 - 5, pass, fail

Opettajat: Maria Kääriäinen

Opintokohteen kielet: Finnish

ECTS Credits:

5 ECTS cr

Language of instruction:

Finnish

Timing:

1st spring term, 3rd period

Learning outcomes:

Upon completion of the course the student will be able to:

- orientate himself/herself towards the scientific community and academic learning
- discuss current nursing research areas in work-life collaboration
- explain the model of evidence-based practice in social and healthcare
- choose a key information gap at the national and international level related to social and healthcare, education or leadership
- search for current, reliable, and summarized information in nursing science and evaluate its quality
- design an evidence summary based on systematic review
- use innovative/digital methods to disseminate nursing science evidence in changing national and/or international networks
- analyze critically collaborative learning and its development needs
- evaluate development of nursing science expertise and continuous learning.

Contents:

Social and healthcare reform, current national and international research areas. Model of evidence-based social and healthcare. Systematic review and critical appraisal. Evidence summary. Evidence-based practice in social and healthcare. Orientation to university studies and integration into the scientific community.

Mode of delivery:

Blended teaching utilizing information and communications technology.

Learning activities and teaching methods:

Lectures/workshop 16 h (in Oulu or via webinar). Independent and collaborative online learning 44 h (distant learning). Completion of collaborative assignments and development of digital material 60 h (distant learning). Continue working on expert profile 5 h (distant learning). Tutor teaching and orientation to the university 10 h (in Oulu).

Target group:

Students in the nursing science and health sciences teacher programmes

Prerequisites and co-requisites:

353301S Nursing Science in the Field of Sciences 5 ECTS cr

Recommended or required reading:

- Korhonen A, Jylhä V, Korhonen T, Holopainen A. 2018. Näyttöön perustuva toiminta –tarpeesta tuloksiin. Hotus/Skhole, Nursing Research Foundation.
- Holopainen, A, Junttila K, Jylhä, V, Korhonen, A, Seppänen S. 2013. Johda näyttö käyttöön hoitotyössä. Bookwell Oy, Porvoo.
- Current national and international scientific articles.

Assessment methods and criteria:

Active participation in the online learning environment, completion of collaborative assignments and development of innovate digital material.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

1 - 5 / fail

Person responsible:

Professor

Working life cooperation:

Working life oriented task

Other information:

By completing this course, you can replace the following course in the previous curriculum: Nursing Science II Nursing science research evidence as a foundation in social and healthcare 5 ECTS cr.

353317S: Generating Scientific Knowledge in Nursing Science, 5 op

Voimassaolo: 01.08.2019 -

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Health Sciences

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits:

5 ECTS cr

Language of instruction:

Finnish

Timing:

2nd autumn term, 1st period

Learning outcomes:

Upon completion of the course the student will be able to:

- critically evaluate evidence in nursing science and justify its significance from the scientific, societal, and social and healthcare perspective
- solve demanding challenges independently and collaboratively based on evidence
- make generalizations and draw conclusions about activities in social and healthcare
- evaluate personal and groups' development of expertise and continuous learning.

Contents:

Extensive knowledge and research in nursing science. Application of evidence in nursing science.

Mode of delivery:

Blended teaching

Learning activities and teaching methods:

Guided exercises 28 h (in Oulu). Small group work, gathering, generating, an evaluating evidence and peer assessment 105 h (distant learning). Group oral examination 1,5 h (in Oulu). Group-specific feedback discussions 0,5 h (in Oulu).

Target group:

Students in the nursing science and health sciences teacher programmes

Prerequisites and co-requisites:

353301S Nursing Science in the Field of Sciences 5 ECTS cr

353302S Nursing Science Knowledge and Innovation in Evidence-Based Practice 5 ECTS cr

353306S Information Literacy and Data Analysis 5 ECTS cr

353316S Research Methods in Nursing Science and Health Management Science 5 ECTS cr

353307S Planning and Conducting Scientific Research 5 ECTS cr

Recommended or required reading:

Current national and international scientific articles.

Assessment methods and criteria:

Lectures/guided exercises, active participation in small group work, guided exercises and group oral examination. Students will collaboratively complete an assignment and participate in a group oral examination, which are graded. Self-assessment, peer assessment, and teacher assessment will be used during the final assessment.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

1 - 5 / fail

Person responsible:

Professor

Working life cooperation:

Working life oriented task

Other information:

By completing this (expanded) course, you can replace the following course in the previous curriculum: Nursing Science III 7 ECTS cr.

353305S: Master's Thesis and Research Seminars, Nursing Science, 25 op

Voimassaolo: 01.08.2019 -

Opiskelumuoto: Advanced Studies

Laji: Diploma thesis

Vastuuyksikkö: Health Sciences

Arvostelu: 1 - 5, pass, fail
Opettajat: Anne Oikarinen
Opintokohteen kielet: Finnish

ECTS Credits:

25 ECTS cr

Language of instruction:

Finnish

Timing:

2nd autumn term, 1st period - 2nd spring term, 4th period. Also an info lecture on 1st spring term.

Learning outcomes:

Upon completion of the course the student will be able to:

- 1. complete scientific data collection either independently or as a member of a research project according to the agreed timetable and critically discuss the thesis and selected data collection methods in relation to the research topic/phenomenon.
- 2. collect research data as planned, critically evaluate methodological decisions, one's own actions and choices that have been made, draw conclusions at different stages of data collection and justify solutions that have been made during data collection.
- 3. critically evaluate methodological decisions, one's own actions and choices that have been made, and draw conclusions at different stages of data analysis. Report data analysis, present research results and argue solutions that have been made during data collection.
- 4. produce a scientific thesis or article independently or as a member of a research project, manage the use of those research methods that have been utilized. Critically evaluate, draw conclusions and argue decisions that have been made and manage scientific discussion.

Contents:

- 1. Completing a personal research plan. Procedures and regulations related to research permissions, obtaining research permissions, ethical perspectives/ethical committee approval.
- 2. Report on data collection that meets scientific criteria. Critical discussion on thesis and data collection methods that have been chose related to the research topic/phenomena.
- 3. Report on data collection and analysis that meets scientific criteria. Critical discussion on thesis and data collection methods that have been chose related to the research topic/phenomena.
- 4. International literature related to thesis topic and methods. Thesis or article that that meets scientific criteria. Critical discussion on the thesis, research results, conclusions, and presentation of further research ideas.
- 5. Report on data collection and analysis that meets scientific criteria. Critical discussion on thesis and data collection methods that have been chose related to the research topic/phenomena.

Mode of delivery:

Blended teaching

Learning activities and teaching methods:

- 1. Group guidance and mentoring 6 h, independent work and familiarisation with literature related to own research topic and research methods 113 h, seminars 5 h, self-assessment and peer assessment 5 h.
- 2. Group guidance and mentoring 10 h, independent work and familiarisation with literature related to own research topic and research methods 110 h, collaboration with the named thesis supervisor 5 h, reporting on data collection 5 h, self-assessment and peer assessment 5 h.
- 3. Group guidance and mentoring 10 h, independent work and familiarisation with literature 110 h, collaboration with the named thesis supervisor 5 h, reporting on data analysis and research results 5h, self-assessment and peer assessment 5 h.
- 4. Group and/or individual guidance 10 h, collaboration with the named thesis supervisor 5 h, reading of national and international literature related to the research topic and methods, reporting on the thesis; writing the scientific thesis or article 100 h. Graduation seminar and poster presentations, participation in organising the seminar 20 h.
- 5. Participation to conference and presenting own study 4 h.
- 6. 1st spring: compulsory info lecture 2 h.

Target group:

Students in the nursing science and health sciences teacher programmes

Prerequisites and co-requisites:

Research methods coursework 20 ECTS cr

Recommended optional programme components:

353205S Written Maturity Test

Recommended or required reading:

- Polit DF & Beck CT (2011) Nursing research: generating and assessing evidence for nursing practice. 9th ed. Wolters Kluwer Health/Lippincott Williams & Wilkins, Philadelphia
- along with national and international literature related to the thesis topic and methods.

Assessment methods and criteria:

- 1. Completion of and reporting on the research permission application,
- 2. Reporting on data collection. Self-assessment and peer assessment
- 3. Reporting on data analysis, self-assessment and peer assessment

 Completion of a scientific thesis or article. Graduation seminar and participation in the organising of the seminar. Participation in one doctoral defence in health sciences during completion of the coursework (25 ECTS cr).

Read more about assessment criteria at the University of Oulu webpage.

Grading:

1-5 / fail. Continuous assessment is used during the course. The tasks: pass / fail. Master's thesis: 1-5 / fail.

Person responsible:

University lecturer

Working life cooperation:

The student is able to conduct the working life-oriented thesis, which supports development of the student's personal expertise.

Other information:

Consists of the following parts:

- 1. Starting the Research Process (5 ECTS credits)
- 2. Data collection (5 ECTS credits)
- 3. Data analysis (5 ECTS credits)
- 4. Reporting of research; reflection on results and reliability, conclusions (10 ECTS credits)

353205S: Written maturity test, 0 op

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Health Sciences

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits:

0 ECTS cr

Language of instruction:

Finnish or Swedish; English, if the Master thesis has been written in English.

Timing:

Varies. The student must complete written maturity test in connection with and as a part of the student's Master's thesis. The student can register for maturity test as soon as she/he has submitted the thesis for review and the supervisor has given her/his permission to register.

Learning outcomes:

The student is able to communicate in Finnish or Swedish and show thorough knowledge of the field of his / her thesis. If the student has taken the maturity test in connection with the Bachelor degree and showed good command in Finnish or Swedish language in it, she/he doesn't have to show it anymore in connection with the Master's degree. However, the student must still take the maturity test and show in it thorough knowledge of the field of her/his thesis.

Contents:

Maturity test connected to the field of the student's Master's thesis

Mode of delivery:

Written maturity test connected to the master thesis

Learning activities and teaching methods:

The student writes the maturity test usually in one of the national languages of Finland (Finnish or Swedish), in which she/he has received her/his school education. If the mother tongue of the student is other than Finnish or Swedish, the Faculty of Medicine will determine separately required language studies.

Target group:

Master degree students in nursing science, health science teacher education and health management science

Prerequisites and co-requisites:

Master's thesis and supervisor's permission to register for maturity test

Assessment methods and criteria:

See <u>general instructions</u> of the maturity test at the University of Oulu (in Finnish). An abstract of the Master thesis can be accepted as a maturity test if the student has showed good command of language in written maturity test of the Bachelor thesis. Read more about <u>assessment criteria</u> at the University of Oulu webpage.

Grading:

Pass / fail

Person responsible:

Supervisor of the Master thesis and teacher of the university's Languages and Communications of the Oulu Extension School

353316S: Research Methods in Nursing and Health Management Science, 5 op

Voimassaolo: 01.08.2019 -

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Health Sciences

Arvostelu: 1 - 5, pass, fail

Opettajat: Outi Kanste, Heidi Siira Opintokohteen kielet: Finnish

Leikkaavuudet:

ay353316S Research Methods in Nursing and Health Management Science (OPEN UNI) 5.0 op

ECTS Credits:

5 ECTS cr

Language of instruction:

Finnish

Timing:

1st autumn term, 1st period

Learning outcomes:

Upon completion of the course the student will be able to:

- compare and interpret the approaches and the nature of scientific research and to draw conclusions on common methodological issues
- describe different data collection and analysis methods
- organise and combine the stages of the research process to form a logical whole
- analyse and evaluate the reliability and validity of research and ethical issues
- communicate according to good scientific practice and principles
- utilise digital solutions in learning.

Contents:

Different study designs, the main stages of the research process, methods in data collection and data analysis, evaluation of reliability and validity and ethical premises.

Mode of delivery:

Blended teaching

Learning activities and teaching methods:

Preliminary assignment in the beginning of the course. Online learning and completion of assignments in the online learning environment 132 h (including lectures on different themes, independent and collaborative online learning, self and peer assessment) and online examination 3 h. Time-based remote teaching 15 h and time-independent remote teaching 120 h.

Target group:

Nursing Science, Health Sciences teacher, and Health Management students.

Recommended or required reading:

- Curtis E, Drennan J (eds.) (2013) Quantitative health research: Issues and methods. Open University Press, Maidenhead. eBook.
- Denzin NK & Lincoln YS (eds.) (2018) The SAGE handbook of qualitative research. SAGE, Los Angeles.

- Kyngäs H, Mikkonen K, Kääriäinen M (eds.) (2020) The application of content analysis in nursing science research. © Springer Nature Switzerland AG.
- Polit DF & Beck CT (2017) Nursing research: generating and assessing evidence for nursing practice. Wolters Kluwer Health, Philadelphia.
- Ruusuvuori J, Nikander P, Hyvärinen M (toim.) (2010). Haastattelun analyysi. Vastapaino, Tampere. eBook
- W. Paul Vogt (ed.) (2011) SAGE Quantitative research methods. SAGE Publications, Inc., Thousand Oaks. eBook.
- National and international scientific articles.

Assessment methods and criteria:

Active participation in online learning and completion of online assignments. Peer and self-assessment, teacher assessment.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

1-5 / fail

Person responsible:

Nursing Science and Health Management Science university lecturers.

353306S: Information Literacy and Data Analysis, 5 op

Voimassaolo: 01.08.2019 -

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Health Sciences

Arvostelu: 1 - 5, pass, fail
Opettajat: Mimmi Tolvanen
Opintokohteen kielet: Finnish

Leikkaavuudet:

ay353306S Information Literacy and Data Analysis (OPEN UNI) 5.0 op

ECTS Credits:

5 ECTS cr

Language of instruction:

Finnish

Timing:

1st year spring term, 4th period

Learning outcomes:

The student is familiar with the research process and with the characteristics of scientific information including an ability to obtain and process scientific information, and to report and apply the results especially in the health sciences.

The student knows the role of scientific publications, can use and evaluate information sources critically. The student will be able to search research articles using basic literature retrieval methods and to use bibliographic databases available at the Medical Faculty.

The student knows basic principles in publication process, research ethics and good scientific practice. The student is familiar with the basic research studies. The student is familiar with requirements for high quality reporting of research findings. Further, the student is able to analyze data with basic statistical methods, use basic statistical significance tests and inference methods, and evaluate critically scientific research reports.

Contents:

Scientific information:

Principles of scientific research, ethics in research, research methods in the main disciplines (clinical medicine, epidemiology, biomedicine and health sciences).

Scientific communication:

Scientific journals, research articles, critical evaluation of research findings, ethics in scientific publication and bibliometrics.

Data analysis:

Aims and phases of statistical research, planning statistical research, obtaining data, variable distributions (frequencies, graphs and statistics), basics in statistical inference and methods (estimates, significance tests and confidence limits), basic methods in comparing groups and estimating associations between variables, specific methods applied in medical research. Critical reading of published research articles.

Mode of delivery:

Blended teaching

Learning activities and teaching methods:

Lectures, small group lessons, assignments and exam.

Target group:

Master students in health sciences

Recommended optional programme components:

352252S Methods of Statistical Analysis in Health Sciences

Recommended or required reading:

Material in lessons and small group lessons.

Assessment methods and criteria:

Regular and active participation in lectures, small group lessons, readiness tests and completion of practical projects and exams.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

1-5 / fail

Person responsible:

Mimmi Tolvanen

353307S: Planning and Conducting Scientific Research, 5 op

Voimassaolo: 01.08.2019 -

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Health Sciences

Arvostelu: 1 - 5, pass, fail

Opettajat: Heidi Siira, Outi Kanste Opintokohteen kielet: Finnish

Leikkaavuudet:

ay353307S Planning and Conducting Scientific Research (OPEN UNI) 5.0 op

ECTS Credits:

5 ECTS cr

Language of instruction:

Finnish

Timing:

1st autumn term, 2nd period

Learning outcomes:

Upon completion of the course the student will be able to:

- critically justify choice of a research topic and define key concepts
- analyse the topic in relation to current scientific and societal discussions

- evaluate approaches in research related to the research topic and choose appropriate methods
- apply and justify the methodological solutions made at different stages of research and justify reliability and validity during the different stages of the research process
- evaluate key ethical issues related to conducting research
- develop a research plan
- clearly and creatively present his/her research plan and respond to questions received regarding the thesis
- evaluate the research topics and plans of other students participating in the course and present constructive questions and give feedback to other students on their research plans
- utilise digital solutions in learning.

The student will achieve the ability to conduct their Master's thesis.

Contents:

Familiarisation with different kinds of research methods and research process. Practicing to design and plan a research plan according to select research topic, planning the different stages of the research process, justification of made choices, familiarisation with concepts and literature related to selected research topic, evaluation of the reliability and validity and research ethics.

Mode of delivery:

Blended teaching

Learning activities and teaching methods:

Online learning and completion of assignments in the online learning environment 132 h (including lectures on different themes, development of the research plan, independent and collaborative learning, peer and group assessment) and online examination 3 h. Time-based remote teaching 15 h and time-independent remote teaching 120 h.

Target group:

Nursing Science, Health Sciences teacher, and Health Management students.

Prerequisites and co-requisites:

353316S Research Methods in Nursing Science and Health Management Science 5 ECTS credits

Recommended or required reading:

- Curtis E, Drennan J (eds.) (2013) Quantitative health research: Issues and methods. Open University Press, Maidenhead. eBook.
- Denzin NK & Lincoln YS (eds.) (2018) The SAGE handbook of qualitative research. SAGE, Los Angeles.
- Kyngäs H, Mikkonen K, Kääriäinen M (eds.) (2020) The application of content analysis in nursing science research. © Springer Nature Switzerland AG.
- Polit DF & Beck CT (2017) Nursing research: generating and assessing evidence for nursing practice. Wolters Kluwer Health, Philadelphia.
- Ruusuvuori J, Nikander P, Hyvärinen M (toim.) (2010). Haastattelun analyysi. Vastapaino, Tampere. eBook
- W. Paul Vogt (ed.) (2011) SAGE Quantitative research methods. SAGE Publications, Inc., Thousand Oaks. eBook.
- National and international appropriate scientific articles.
- National and international literature relevant to the research plan.

Assessment methods and criteria:

Active participation in online learning, development of a research plan. Peer and group assessment, teacher assessment. The research plan is evaluated numerically.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

1-5 / fail

Person responsible:

Nursing Science and Health Management Science university lecturers.

Working life cooperation:

The student is able to conduct a working life-oriented scientific research.

352252S: Methods of Statistical Analysis in Health Sciences, 5 op

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Health Sciences

Arvostelu: 1 - 5, pass, fail

Opettajat: Mimmi Tolvanen

Opintokohteen kielet: Finnish

ECTS Credits:

5 ECTS cr

Language of instruction:

Finnish

Timing:

Master degree studies, 1st autumn term 1st period

Learning outcomes:

Upon completion of the course the students are able to plan collection of data, to transfer the data into a form which can be processed with a computer and to use independently statistical software for processing and analysis of data. The students are able to apply basic statistical methods in analysis of research problems. The students know multivariate and other special statistical methods used for analysis of data in health sciences. Additionally, the students are able to report research results and to recognize the issues which are important in interpreting the results published in international publications of health sciences.

Contents:

Basic concepts of statistics. Design of studies. Data collection. Data preparation. Using statistical software. Choosing the methods of analysis. Comparing groups. Repeated measurements. Studying associations. Multivariable methods. Regression models. Reliability. Reporting the results. Article evaluation.

Mode of delivery:

Contact teaching and group exercises.

Learning activities and teaching methods:

Lectures 28 h, group exercises 20 h and learning assignments.

Target group:

From 2019-2020 Curriculum onward Master students of health sciences.

Recommended or required reading:

Lecture presentations and supplementary group work materials. Uhari M ja Nieminen P: Epidemiologia ja biostatistiikka. ("Epidemiology and biostatistics"; no translation in English.) 2nd edition Duodecim, 2012.

Assessment methods and criteria:

Accepted learning assignments and participation in group exercises.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

Pass / fail

Person responsible:

Mimmi Tolvanen

A540304: Didactics in nursing science, 35 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Intermediate Studies

Laji: Study module

Vastuuyksikkö: Health Sciences

Arvostelu: 1 - 5, pass, fail
Opettajat: Heli-Maria Kuivila
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

353231A: Introduction to Health Pedagogy, 5 op

Voimassaolo: 01.08.2019 -

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuvksikkö: Health Sciences

Arvostelu: 1 - 5, pass, fail

Opettajat: Jonna Juntunen, Heli-Maria Kuivila

Opintokohteen kielet: Finnish

Leikkaavuudet:

ay353231A Introduction to Health Pedagogy (OPEN UNI) 5.0 or

ECTS Credits:

5 ECTS cr / 135 hours of work

Language of instruction:

Finnish/English

Timing:

1st autumn semester, 2nd period

Learning outcomes:

Upon completion of the course the student:

- Is able to plan education and teaching in an evidence-based manner, to evaluate different learning theories, learning strategies, learning processes, and teaching methods and to analyze one's own perspective of learning.
- Is able to evaluate different learning environments and work in online environments utilizing digital learning materials.
- Is able to evaluate and develop teaching based on ethical principles and one's own philosophy of values and openness.
- Is able to evaluate and take into account the effects of increased ethnic and cultural diversity in social-, healthcare, and rehabilitation systems.

Contents:

Evidence-based teaching. Perspectives and viewpoints of learning. Learning strategies. Learning processes. Teaching methods. Learning environments. Teacher ethical principles. Cultural diversity.

Mode of delivery:

The course is delivered as an online course in Finnish and English.

Learning activities and teaching methods:

Webinars 5 x 2 h (time-bound distance learning). Online working and assignments 122 h (independent distance-learning). Online exam (e-exam, Examinarium) 3 h.

Target group:

Nursing Science students who have chosen to complete coursework in Leadership in Nursing Option or Clinical Nursing Expertise Option, along with Master's students in the Health Sciences Teacher Education programme.

Prerequisites and co-requisites:

No prerequisites required.

Recommended optional programme components:

The course is an independent entity and does not require additional studies carried out at the same time.

Recommended or required reading:

- Mikkonen K ym. (2019). Competence and development of social-, health care, and rehabilitation educators. TerOpe-project report. http://urn.fi/urn.isbn:9789526224794
- Saaranen T ym. (2016) Health care teacher's manual.
- Oermann MH (2015). Teaching in nursing and role of the educator.
- Additional current international literature and research studies.

Assessment methods and criteria:

Active participation in online learning, completion of the required online assignments and exam. Self- and teacher assessment will be used during the course. A competence-based evaluation matrix will be used. Students' competence will be evaluated based on the online assignments (pass/to be supplemented) and exam (1-5, fail).

Read more about assessment criteria at the University of Oulu webpage.

Grading:

The course utilizes a numerical grading scale 1-5 / fail. The grade in the course is based on the exam score.

Person responsible:

University teacher

Working life cooperation:

No working life cooperation.

352230A: Pedagogical Processes and Teaching, 5 op

Voimassaolo: 01.08.2019 -

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Health Sciences

Arvostelu: 1 - 5, pass, fail

Opettajat: Heli-Maria Kuivila

Opintokohteen kielet: Finnish

ECTS Credits:

5 ECTS cr

Language of instruction:

Finnish

Timing:

1st spring semester, 3rd period

Learning outcomes:

Upon completion of the course the student:

- Is able to strategically plan, implement, evaluate, and continuously develop competence-based curricula in the social-, healthcare and/or rehabilitation field.
- Is able to adhere to the principles of competence identification, recognition and personalization.
- Is able to plan, implement, evaluate, and renew learning, teaching and mentoring in social-, healthcare, and/or rehabilitation from the perspective of students, the larger phenomenon in question, and working life.
- Is able to develop and use one's ethical thinking and attitudes for promoting learning, teaching, student, work community and practice.
- Is able to evaluate cultural differences in interaction and communication and to work on solving interactive barriers in teaching and working environments.
- Is able to collaboratively plan and implement communication efforts that enhance the visibility of health science teacher education in educational organizations, companies, or in the third sector, using different communication channels.

Contents:

Theories associated with curricula and the curriculum as a basis for teaching (goals, learning criteria, learning content, curriculum process). Fundamentals and forms of assessment. Assessment of healthcare teaching and education and its effectiveness. Creating learning outcomes. Assessment of students' competence and learning. Healthcare education and ethics. Cultural diversity networking and communication. Strengthening of the visibility of teacher education and influential practice at the societal level.

Mode of delivery:

Blended teaching

Learning activities and teaching methods:

Workshops 20 h, independent and collaborative learning in the online learning environment 50 h, collaborative assignments 25 h, familiarization with the literature, searching for and critical appraisal of appropriate literature 30 h, self-assessment and reporting of learning (e.g. learning journal, personal blog, etc.) 10 h.

Target group:

The course is intended for students of the Health Science Teacher Education programme.

Prerequisites and co-requisites:

Completion of Basic studies in education or Basic studies in adult education (recommended) along with 353231A Introduction to Health Pedagogy 5 ECTS cr.

Recommended or required reading:

- Saaranen T. ym. (2016) or newer edition. Terveysalan opettajan käsikirja.
- Oermann MH. (2015) Teaching in nursing and role of the educator.
- Publications and educational material by the Finnish National Agency for Education, current national and international scientific literature.
- McDonald ME. 2019 (or 2007) The Nurse Educator's Guide to Assessing Learning outcomes. 2nd edition. Jones and Bartlett Publishers. Canada.
- Mikkonen K ym. (2019). Competence and development of social-, health care, and rehabilitation educators. TerOpe-project report. http://urn.fi/urn.isbn:9789526224794

Assessment methods and criteria:

Completion of the course requires active participation in contact teaching (at least 80%). Also requires online learning and successful completion of learning assignments.

There is continuous self-, peer- and teacher assessment during the course.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

1-5 / fail. The grade in the course is based on the grade given on the learning assignments.

Person responsible:

University teacher

352212A: Digital pedagogy, 3 - 5 op

Voimassaolo: 01.08.2017 -

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Health Sciences

Arvostelu: 1 - 5, pass, fail
Opettajat: Heli-Maria Kuivila
Opintokohteen kielet: Finnish

ECTS Credits:

5 ECTS cr

Language of instruction:

Finnish

Timing:

1st spring semester, 3rd period

Learning outcomes:

Upon completion of the course the student:

- Is able to understand the importance of digital competence in professional practice.
- Is able to identify the terminology related to digital competence.
- Is able to structure research evidence while analyzing his/her digital competence and apply knowledge into professional practice.
- Is able to identify the challenges and advantages of digitalization and critically examine these in online learning.

- Is able to utilize online learning as part of teaching.
- Is able to recognize the role of the teacher in online learning.
- Is able to plan and design a course in an online learning environment and plan online learning together with other students to support joint construction of knowledge.
- Is able to teach and mentor student learning using pedagogically sound digital and collaborative teaching methods and simulation learning environments creatively.
- Is able to adhere to principles of data protection and copyright.

Contents:

Key terminology related to digital competence. Six components of teachers' digital competence according to the DigCompEdu-framework developed by the European Commission. Teachers' professional practice, digital pedagogical content related to teaching and learning, and strengthening of students' digital competence.

During the course, the student will orientate themselves with the following content: how to take advantage of digitalization during interaction, collaboration and in professional development, how to produce and edit meaningful and interesting content into a digital learning environment and share and manage it, what challenges and advantages digital environments bring to learning, teaching and assessment, what kind of digital solutions can the teacher use to support students´ participation, what do information and media literacy skills consist of.

Digital pedagogy as a part of health science teacher's work, digital solutions in teaching, tools and applications. Simulation pedagogy.

Mode of delivery:

Blended teaching

Learning activities and teaching methods:

Workshops 16 h, independent and collaborative learning in the online learning environment 64 h, familiarization with the literature, searching for and critically appraising appropriate literature 20 h.

Target group:

The course is intended for students of the Health Science Teacher Education programme.

Prerequisites and co-requisites:

Completion of Basic studies in education or Basic studies in adult education (recommended) along with 353231A Introduction to Health Pedagogy 5 ECTS cr and 352230A Pedagogical Processes and Teaching 5 ECTS cr.

Recommended or required reading:

- Redecker C. 2017. European Framework for the Digital Competence of Educators: DigCompEdu. Punie Y. (ed.). EUR 28775 EN. Publications Office of the European Union, Luxembourg, 2017 doi: 10.2760/159770
- Saaranen T. ym. (2016) or newer edition. Terveysalan opettajan käsikirja.
- Oermann MH. (2015) Teaching in nursing and role of the educator.
- Material listed in the online learning environment (digital literature, articles, lectures, videos, and interactive content).
- Current national and international scientific literature.

Assessment methods and criteria:

Completion of the course requires active participation in contact teaching (at least 80 %). Also requires online learning and successful completion of learning assignments.

There is continuous self-, peer- and teacher assessment during the course.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

Pass/fail (a passing grade requires that at least 70 % of the set goals are met).

Person responsible:

University teacher

352236A: Leadership, Innovations and Networks in Education, 5 op

Voimassaolo: 01.08.2019 -

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Health Sciences

Arvostelu: 1 - 5, pass, fail
Opettajat: Heli-Maria Kuivila
Opintokohteen kielet: Finnish

Leikkaavuudet:

ay352236A Leadership, Innovations and Networks in Education (OPEN UNI) 5.0 op

ECTS Credits:

5 ECTS cr

Language of instruction:

Finnish

Timing:

1st spring semester, 4th period

Learning outcomes:

Upon completion of the course the student:

- Is able to monitor and implement social-, healthcare, rehabilitation, and education policies and legislation, as well as educational administrative and financial functions.
- Is able to build and develop multidisciplinary scientific and professional networks for the development of working life, education, and society.
- Is able to build and continuously develop international cooperation.
- Is able to manage one's self, issues, and people, and to mentor and coach colleagues and students.
- Is able to promote, maintain, and develop one's own, work community's and students' well-being and adapt flexibly to rapid changes in educator's work.
- Is able to develop sustainable innovations to meet social-, healthcare, and rehabilitation challenges with students and stakeholders.
- Is able to develop sustainable innovations to meet social-, healthcare, and rehabilitation challenges with students, colleagues and stakeholders.
- Is able to act as a social influencer in the renewed social-, healthcare, and rehabilitation service system.

Contents:

Healthcare education system, laws that govern administration and education. Legal and ethical rights, responsibilities and accountabilities of the student and teacher. Project work, project management and communication skills. Building a network of working life contacts. National and international collaboration. Initiation of practice that adheres to principles of sustainable development and has societal influence. Wellbeing.

Mode of delivery:

Blended teaching

Learning activities and teaching methods:

Workshops 15 h, independent learning 46 h including online learning, familiarization with and evaluation of current literature and research. Collaborative assignment 60 h. Self-assessment of learning and competence and reporting of this (personal blog) 10 h. Research seminar (4 h).

Target group:

The course is intended for students of the Health Science Teacher Education programme.

Prerequisites and co-requisites:

Completion of Basic studies in education or Basic studies in adult education (recommended), along with 353231A Introduction to Health Pedagogy 5 ECTS cr, 352230A Pedagogical Processes and Teaching 5 ECTS cr and 352212A Digital Pedagogy 5 ECTS cr.

Recommended or required reading:

- Saaranen T. ym. (2016) or newer edition. Terveysalan opettajan käsikirja.
- Oermann MH. (2015) Teaching in nursing and role of the educator.
- Laws that regulate professional healthcare education and higher education, publications and learning material produced by the Ministry of Education and Culture and the Finnish National Agency for Education
- Current national and international scientific literature.

Assessment methods and criteria:

Completion of the course requires active participation in contact teaching (at least 80 %). Also requires online learning and successful completion of learning assignments. Updating of personal blog.

There is continuous self-, peer- and teacher assessment during the course.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

1-5 / fail. The grade in the course is based on the grade given on the learning assignments.

Person responsible:

University teacher

352237A: Teaching Practice Experience in an Educational Organisation, 10 op

Voimassaolo: 01.08.2019 -

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Health Sciences

Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits:

10 ECTS cr

Language of instruction:

Finnish

Timing:

2nd autumn semester, 1st and 2nd period

Learning outcomes:

Upon completion of the course the student:

- Is able to evaluate and create professional expertise in the field, taking into account the multidisciplinary, operational and patient/client/rehabilitee characteristics and involvement.
- Is able to draw conclusions based on social-, healthcare and/or rehabilitation knowledge in education.
- Is able to teach and mentor student learning using pedagogically sound digital and collaborative teaching methods and learning environments creatively (e.g. simulation, clinical practice).
- Is able to work in one's profession, considering the moral and ethical duty of educators to provide culturally competent teaching and student guidance.
- Is able to act and mentor students to act constructively, contextually and creatively in various social-, healthcare and rehabilitation contexts.
- Is able to continuously monitor, use and critically evaluate research-based information (for example, care and rehabilitation recommendations, reviews) in the social-, healthcare, and/or rehabilitation fields to develop competence and activities personally, at the level of work and collaborative networks.
- Is able to guide students to find and use reliable and up-to-date evidence for customer-oriented decision making (e.g. care and rehabilitation recommendations).

Contents:

Collaboration and building a network of working life contacts. Multidisciplinary collaboration, learning and competence development. Planning teaching, implementation of teaching in an educational organization. Different learning environments. Learning materials and teaching methods. Self- and peer assessment in teaching. Practice in teaching and supervision that is interactive, has a societal influence and adheres to principles of sustainable development. Future challenges and directions faced by healthcare teachers and in teacher education.

Mode of delivery:

The course is conducted as contact teaching and as a learning experience in real working life environments. The teaching practice can be completed in an international educational organization or as a clinical placement abroad.

Learning activities and teaching methods:

Workshops 20 h (3 workshops and a seminar), planning of one's own teaching (comprehensive plan and thematic plans) 130 h and completion of teaching 15 h (teaching on 10 occasions/events), peer

assessment of teaching 15 h, familiarization with national and international literature 80 h. Self-assessment of learning and reporting relevant learning experiences (e.g. updating of personal blog, writing of learning diary, etc.) 10 h.

Target group:

The course is intended for students of the Health Science Teacher Education programme.

Prerequisites and co-requisites:

Completion of Basic studies in education or Basic studies in adult education, along with 353231A Introduction to Health Pedagogy 5 ECTS cr, 352230A Pedagogical Processes and Teaching 5 ECTS cr, 352212A Digital pedagogy 5 ECTS cr, and 352236A Leadership, innovation and Networks in Education 5 ECTS cr.

Recommended or required reading:

- Mikkonen K ym. (2019). Competence and development of social-, health care, and rehabilitation educators. TerOpe-project report. http://urn.fi/urn.isbn:9789526224794
- Saaranen T. ym. (2016) or newer edition. Terveysalan opettajan käsikirja.
- Oermann MH. (2015) Teaching in nursing and role of the educator.
- National and international literature and research in nursing science that is relevant to the student's topic that they will teach. National and international literature and research studies from educational science and nursing science didactics.

Assessment methods and criteria:

Preparation of general plan for practical teacher training, includes two versions of concept maps of the student's teaching. Development of thematic plans for each teaching event. Teaching in the educational organization. Self-assessment of learning and reporting on this (e.g. updating of personal blog, writing of learning diary, etc.). The comprehensive teaching plan, the thematic plans for teaching and the teaching events must be successfully completed.

Continuous self-, peer, and teacher evaluation and a competence-based evaluation matrix will be used during the course.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

Pass / fail

Person responsible:

University teacher

Working life cooperation:

Completion of teaching practice. Building a network of working life contacts.

352238A: Teaching Practice Experience in a Clinical Environment, 5 op

Voimassaolo: 01.08.2019 -

Opiskelumuoto: Advanced Studies

Laii: Course

Vastuuyksikkö: Health Sciences

Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:

5 ECTS cr

Language of instruction:

Finnish

Timing:

2nd spring semester, 3rd period

Learning outcomes:

Upon completion of the course the student:

- Is able to plan, implement and critically evaluate teaching and learning, produce evidence-based digital learning material and try out different teaching methods in various learning environments in the national and/or in a foreign language.
- Is able to lead issues and people and develop and create new approaches in continuing education.
- Is able to anticipate future competence needs and develop quality, processes, and performance in social-, healthcare, and rehabilitation education.
- Is able to evaluate one's own and other students' teaching.
- Is able to develop a teaching portfolio and evaluate personal teaching merits according to the principles of developmental evaluation, and identify the significance of continuously monitoring personal development.
- Is able to reflect on and apply ethical competence in teaching, counseling, and patient, client, and/or rehabilitee care, to continuously evaluate and develop one's own competence concerning the goals, contents and pedagogical solutions of the curriculum.
- Is able to review and develop one's own competence within the varied aspects of the educator's work and regarding organizational strategy.
- Is able to develop one's competence in different ways, both in working life and through further and continuing education.

Contents:

Team teaching. Multidisciplinary collaboration, competence and learning. Planning and implementation of teaching in continuing education (for example in social-, health care and/or rehabilitation professional of healthcare organization). Self- and peer assessment of teaching. Learning materials and teaching methods. Entrepreneurship, internationalism, and multiculturalism in the work of a healthcare teacher. Teaching portfolio.

Mode of delivery:

The course is conducted as contact teaching and as a learning experience in real working life environments. The teaching practice can be completed in an international educational program or as a clinical placement abroad.

Learning activities and teaching methods:

Contact teaching 10 h, teaching planning with team teaching / co-teaching, studying international literature oneself to national and international literature 20 h, completion of teaching 5 h (2 teaching events), peer assessment 2 h, written assignments (thematic teaching plan, peer assessments) 20 h, development of a personal teaching portfolio 78 h.

Target group:

The course is intended for students of the Health Science Teacher Education programme.

Prerequisites and co-requisites:

Completion of Basic studies in education or Basic studies in adult education, along with 353231A Introduction to Health Pedagogy 5 ECTS cr, 352230A Pedagogical Processes and Teaching 5 ECTS cr, 352212A Digital Pedagogy 5 ECTS cr, 352236A Leadership, Innovation and Networks in Education 5 ECTS cr, and 352237A Teaching Practice in an Educational Organisation 10 ECTS cr.

Recommended or required reading:

National and international literature and research in nursing science that is relevant to the student's topic that they will teach. National and international literature and research studies from educational science and nursing science didactics.

Assessment methods and criteria:

Teaching as part of continuing education. Collaborative planning of a team-teaching event and development of thematic teaching plan regarding the teaching events. Development of a teaching portfolio. The thematic teaching plan and teaching events must be successfully completed. The teaching events will be evaluated through self-, peer, and teacher evaluation. Continuous evaluation and a competence-based evaluation matrix will be used.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

Pass / fail

Person responsible:

University teacher

Working life cooperation:

The teaching practice will be completed in collaboration with contacts in working life (Northern Ostrobothnia Hospital District).