

# Opasraportti

## FMed - Health Management Science, MHS (2018 - 2019)

### MASTER'S DEGREE IN HEALTH SCIENCES (120 ECTS cr)

### MASTER'S PROGRAMME IN HEALTH MANAGEMENT SCIENCE

The Master's degree (MHS) in Health Sciences at the University of Oulu is based on the Government Decree on University Degrees [794/2004](#). The degree programme leads to the degree of Master of Health Sciences (120 ECTS). The studies for Master's degree in Health Sciences (second-cycle university degree) are different in each Master's programme according to the chosen specialization. Upon completion of the Master's degree, the student is eligible for applying for further academic education (doctoral degree). Students who have obtained Bachelor's and Master's Degrees in Health Sciences, qualify for various demanding positions in social welfare and public health care including positions in planning, development, research, teaching and management on both national and international level.

### LEARNING OBJECTIVES FOR THE MASTER'S PROGRAMME IN HEALTH SCIENCES

The learning objectives of the Master's Programme correspond to the aims of the Finnish [National Framework for Qualifications and other Learning](#).

Upon completion of the Master's degree in Health Sciences the student is able:

- to acquire and evaluate critically latest information of health management science and to use it independently and innovatively from the health care management and development point of view
- to participate actively in research, expert tasks, management and development in public, private and third sector of the health care
- to communicate orally and in writing in a clear and analytical manner
- to use digital solutions in her/his work as a health care specialist
- to reflect on and evaluate one's own actions and competence and that of other experts and professionals in the operational environment of health care
- to develop one's own knowledge and skills and those of other experts and professionals in the health care in accordance with the changing requirements of the sector

- to conduct research using scientific research methods and to engage in postgraduate studies in health management science.

## STRUCTURE OF THE MASTER'S DEGREE IN HEALTH SCIENCES

### [Course Structure Diagram 2018 – 2019](#)

The Master's Degree in Health Sciences consists of following areas of competence: Health Management Science Skills, Scientific Practices and Research Skills, Minor Subject and Optional Studies.

### **ADVANCED STUDIES 85 ECTS cr**

#### ***Health Management Science Skills 70 ECTS cr***

##### **Studies included in the area of competence:**

- 353217S Multiprofessional Management 10 ECTS cr
- 353218S Leadership Training part I 5 ECTS cr
- 353239S Leadership Training part II 5 ECTS cr
- 353410S Master Thesis and Research Seminars 40 ECTS cr including
- 353411S Master Thesis and Research Seminars part I 15 ECTS cr
- 353412S Master Thesis and Research Seminars part II 25 ECTS cr
- 353408S Synthesis in Health Management Science part I 5 ECTS cr
- 353409S Synthesis in Health Management Science part II 5 ECTS cr
- 353205S Written Maturity Test 0 ECTS cr

#### ***Scientific Practices and Research Skills 15 ECTS cr***

##### **Studies included in the area of competence:**

- 353203S The Application of Research Methods in Health Sciences 10 ECTS cr
- 3532252S Methods of Statistical Analysis in Health Sciences 5 ECTS cr

### **MINOR SUBJECT 25 ECST cr**

The student may orient the studies according to personal objectives and Personal Study Plan (e-PSP) by including in the degree university level study modules (at least 25 ECTS cr) of different sciences completed / to be completed in Finland or abroad.

### **OPTIONAL STUDIES 10 ECTS cr**

Optional studies are basic, intermediate or advanced studies and study modules completed at the Research Unit of Nursing Science and Health Management or at other units of the University of Oulu and at other national/international universities. Optional studies may include single study units. If minor studies include study module of 35 ECTS cr, no optional studies are required.

## ARRANGEMENTS FOR RECOGNITION OF PRIOR LEARNING

Recognition of prior learning (RPL) follows the main principles as defined by the University of Oulu. According to [University of Oulu Education Regulations](#) paragraph 27 *Accreditation of studies taken elsewhere and recognition of prior learning*, the principles concerning accrediting studies taken in other Finnish and foreign universities and other educational institutions are stipulated in the curricula or other regulations, unless they have not been stipulated elsewhere. For further information see <http://www oulu.fi/university/node/34963>

Recognition of studies based on prior Master's degree in health care from university of applied sciences, and studies completed at other universities requires separate application procedure through [OSAT system](#). Application for recognition of prior learning has to be submitted to the teacher responsible for the study unit in question. The decision is made by the Programme Director of the Master's Programme in Health Management Science.

## **STUDIES OF MASTER´S DEGREE IN HEALTH SCIENCES PER TERM**

### 1<sup>st</sup> year / autumn term

#### ***Scientific Practices and Research Skills***

352252S Methods of Statistical Analysis in Health Sciences 5 ECTS cr

353203S The Application of Research Methods in Health Sciences 10 ECTS cr

353218S Leadership Training part I, 5 ECTS cr

353408S Synthesis in Health Management Science part I 5op

#### ***Minor Subject 5 ECTS cr***

### 1<sup>st</sup> year /spring term

#### ***Health Management Science Skills***

353217S Multiprofessional Management 10 ECTS cr

353239S Leadership Training part II, 5 ECTS cr

353408S Synthesis in Health Management Science part II, 5 ECTS cr

353411S Master Thesis and Research Seminars part I 10 ECTS cr

### 2<sup>nd</sup> year / autumn term

#### ***Health Management Science Skills***

353411S Master Thesis and Research Seminars part I 5 ECTS cr

353412S Master Thesis and Research Seminars part I 20 ECTS cr

#### ***Minor Subject 5 ECTS cr***

### 2<sup>nd</sup> year /spring term

#### ***Health Management Science Skills***

353412S Master Thesis and Research Seminars part I 5 ECTS cr

353205S Written Maturity Test 0 ECTS cr

*Minor Subject 15 ECTS cr*

*Optional studies 10 ECTS cr*

## Tutkintorakenteet

### Master's Programme in Health Management Science, MHSc

Tutkintorakenteen tila: published

Lukuvuosi: 2018-19

Lukuvuoden alkamispäivämäärä: 01.08.2018

#### **Advanced Studies in Health Management Science (vähintään 85 op)**

Advanced Studies (85 ECTS cr in 2018-2019) includes the following areas of competence: Health Management Science skills 70 ECTS cr, and Scientific practices and research skills 15 ECTS cr.

353408S Synthesis in Health Management Science Part I (2018-2019): 5 ECTS cr.

A544703: Health Management Science, advanced studies, 75 - 95 op

#### *Advanced Studies in Health Management Science*

353217S: Multiprofessional Management, 10 op

353218S: Leadership Training, part 1, 5 op

353239S: Leadership Training, part 2, 5 op

353408S: Synthesis in Health Management Science Part I, 5 - 10 op

353409S: Synthesis in Health Management Science Part II, 5 op

353410S: Master Thesis and Research Seminars, 40 op

353411S: Master Thesis and Research Seminars, part I, 15 op

353412S: Master Thesis and Research Seminars, part II, 25 op

353205S: Written maturity test, 0 op

353203S: The Application of Research Methods in Health Sciences, 10 op

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

#### **Minor Subject (vähintään 25 op)**

Study modules of at least 25 ECTS cr completed at the University of Oulu or other universities, according to electronic Personal Study Plan (ePSP).

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

Studies completed at the University of Oulu or other universities according to electronic Personal Study Plan (ePSP). If minor studies include study module of 35 ECTS cr, no optional studies are required.

# Opintojaksojen kuvaukset

## Tutkintorakenteisiin kuuluvien opintokohteiden kuvaukset

### A544703: Health Management Science, advanced studies, 75 - 95 op

**Opiskelumuoto:** Advanced Studies

**Laji:** Study module

**Vastuuyksikkö:** Health Sciences

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

**Opettajat:** Marjo Suhonen

**Opintokohteen kielet:** Finnish

Ei opintojaksokuvauksia.

*Advanced Studies in Health Management Science*

### 353217S: Multiprofessional Management, 10 op

**Opiskelumuoto:** Advanced Studies

**Laji:** Course

**Vastuuyksikkö:** Health Sciences

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

**Opettajat:** Marjo Suhonen, Heidi Pirkola

**Opintokohteen kielet:** Finnish

#### **ECTS Credits:**

10 ECTS cr

#### **Language of instruction:**

The language of instruction is Finnish. When necessary, the course can be completed in English.

#### **Timing:**

Master degree studies, 1st spring semester, 3rd period

#### **Learning outcomes:**

Upon completion of the course, the student is able to:

apply independently the concepts and models of health care management in exam and in written group work exercise with working life orientation

apply and analyze the complex of management in health care on the basis of knowledge gained from previous studies and knowledge and newest scientific information gained and collected during this particular course at the individual assignment

interpret, analyze and reflect in group work exercise not only the challenging situations of multi-professional leadership in demanding expert tasks of social and health care, but also related scientific research

evaluate critically and create different solutions to these actual situations at work

during a visit of an external expert ask questions and make comments relevant from the viewpoint of health care management

as a member of a tutorial group present orally results of the group exercise together with other group members

in presentation of the group exercise use digital learning methods in a relevant way which also motivates other students to participate and also in exam in Exam system

evaluate and give feedback on solutions of other students and

receive constructive feedback on group exercise.

**Contents:**

Concepts, models and theoretical starting points of health care management. Challenging situations in management at work.

**Mode of delivery:**

Blended teaching

**Learning activities and teaching methods:**

Contact teaching 20 hours including lecture of a visiting expert. Preparing for exam and exam in Exam system 70 h, studying in small groups 100 h, and independent studying 80 h. The course uses web-based learning environment. Continuous assessment will be applied.

**Target group:**

Master Degree students in health management science

**Prerequisites and co-requisites:**

None

**Recommended optional programme components:**

None

**Recommended or required reading:**

**Literature for exam.** Choose three titles from the following list:

Ferlie Ewan, Montgomery Kathleen & Pedersen Anne R (Eds.) (2016) The Oxford handbook of health management. Oxford: Oxford university press.

Fried Bruce J., Fottler Myron D. (Eds.) Human resources in healthcare: managing for success. 3rd ed. Chicago : Health Administration Press ; Arlington, Va.: Association of University Programs in Health Administration, 2008.

Paasivaara, Leena & Suhonen, Marjo & Virtanen, Petri (2013): Projektijohtaminen hyvinvointipalveluissa. 2., tarkistettu ja ajantasaistettu laitos. Tietosanoma, Helsinki.

White, Kenneth R., Griffith. John R. The well-managed healthcare organization. 7th ed. Chicago: Health Administration Press, 2010.

Wolf Jason A. ym. (eds.). Organization development in healthcare: conversations on research and strategies. Bingley: Emerald Group, 2011.

**Supplementary course literature:**

Anthony R. Kovner, David J. Fine, Richard D'Aquila. (eds.) Evidence-based management in healthcare Chicago : Health Administration Press, 2009.

McLaughlin, Daniel B, Julie M. Hays. Healthcare operations management / Daniel B. McLaughlin, Julie M. Hays. Chicago : Health Administration Press ; Washington, DC : AUPHA Press, 2008.

Schwalbe, Kathy, Furlong Dan. Healthcare project management. Minneapolis, NN: Schwalbe Publishing, 2013.

Bahadir Inozu ym. Performance improvement for healthcare: leading change with lean, six sigma, and constraints management. New York: McGraw-Hill, cop. 2012.

Myron D. Fottler, Naresh Khatri, Grant T. Savage. (Eds.) Strategic human resource management in health care. Bingley, UK : Emerald, 2010.

Hyyryläinen Esa (toim.) Näkökulmia hallintotieteisiin. Vaasa: Vaasan yliopisto, 2012. [http://www.uwasa.fi/materiaali/pdf/isbn\\_978-952-476-380-6.pdf/](http://www.uwasa.fi/materiaali/pdf/isbn_978-952-476-380-6.pdf/) (RELEVANT PARTS)

Virtanen, Turo ym. (toim.) Suomalainen hallinnon tutkimus: mistä, mitä, minne? Tampere University Press, 2011.

Jari Vuori (toim.) Terveys ja johtaminen: terveyshallintotiede terveydenhuollon työyhteisöissä. Porvoo; Helsinki: WSOY, 2005.

Scientific publications, such as, for example, International Journal of Healthcare Management; Journal of Nursing Management; Leadership in Health Services; International Journal of Quality in Health care; Journal of Health Care Compliance.

**Assessment methods and criteria:**

Independent and group work, exercises, exam, active participation in contact teaching. The total grade will be determined based on the grade of the group exercise and individual assignment. In case when the grade is settling between two grades the student can receive the higher one with active participation in contact teaching. Read more about [assessment criteria](#) at the University of Oulu webpage.

**Grading:**

Total grade: 1-5 / fail. Grading of the group exercise and individual assignment: 1-5/fail. Grading of exam: pass / fail.

**Person responsible:**

University lecturer

**Working life cooperation:**

Learning assignments with working life relevance, lecture by visiting expert

**353218S: Leadership Training, part 1, 5 op**

**Voimassaolo:** 01.08.2017 -

**Opiskelumuoto:** Advanced Studies

**Laji:** Course

**Vastuuyksikkö:** Health Sciences

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

**Opintokohteen kielet:** Finnish

**ECTS Credits:**

5 ECTS cr

**Language of instruction:**

Teaching language is Finnish. When necessary, the course can be completed in English.

**Timing:**

Master degree studies, 2nd autumn semester, 2nd period. Practical training can be completed during summer.

**Learning outcomes:**

Upon completion of the course, the student is able to:

analyze, evaluate, interpret and reflect one's management competence in the field of administration, management or research in practical social and health care

apply one's field-specific skills in practical training in accordance with the requirements of the duties in the chosen training job (knowledge of legislation, project management skills, financial administration skills).

demonstrate in a portfolio one's development and competence as an expert and ability to apply knowledge in managerial, coordination, planning and organizational tasks in social and health care.

demonstrate one's performance, communication and technology skills when presenting the portfolio.

demonstrate in a portfolio one's competence in producing a written report.

**Contents:**

Visits to organizations in pairs or small groups. Practical training part of the course in national or international health care organization in accordance with personal training plan. In seminars one presents the visit and one's portfolio. As part of independent work one conducts Master's PSP.

**Mode of delivery:**

Blended teaching

**Learning activities and teaching methods:**

The course consists of two parts, 10 ECTS credits and 6 weeks of practical training in total. Individual guiding in choosing training organization (2 h), group and web-based (Optima) studying 6 h, practical training in management (3 weeks) and Management reflection seminars 8 h, independent studying 119 h.

**Target group:**

Master Degree students in health management science

**Prerequisites and co-requisites:**

None

**Recommended optional programme components:**

None

**Recommended or required reading:**

Relevant scientific articles and other literature

**Assessment methods and criteria:**

Participation in seminars and group work. Practical training in management in Finland or other countries and producing a portfolio. The working life expert (the named tutor) gives assessment about the practical training. The student gives self-assessment at the portfolio. Read more about [assessment criteria](#) at the University of Oulu webpage.

**Grading:**

Pass / fail

**Person responsible:**

University teacher

**Working life cooperation:**

Working life training, working life learning tasks, working life based assessment.

**353239S: Leadership Training, part 2, 5 op**

**Voimassaolo:** 01.08.2017 -

**Opiskelumuoto:** Advanced Studies

**Laji:** Course

**Vastuuyksikkö:** Health Sciences

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

**Opintokohteen kielet:** Finnish

**ECTS Credits:**

5 ECTS cr

**Language of instruction:**

Language of instruction is Finnish. When necessary, the course can be completed in English.

**Timing:**

Master degree studies, 2<sup>nd</sup> spring semester, 3<sup>rd</sup> period. Practical training can be completed during summer.

**Learning outcomes:**

Upon completion of the course, the student is able to:

analyze, evaluate, interpret and reflect one's management competence in the field of administration, management or research in practical social and health care

apply one's field-specific skills in practical training in accordance with the requirements of the duties in the chosen training job (knowledge of legislation, project management skills, financial administration skills).

demonstrate in a portfolio one's development and competence as an expert and ability to apply knowledge in managerial, coordination, planning and organizational tasks in social and health care.

demonstrate one's performance, communication and technology skills when presenting the portfolio.

demonstrate in a portfolio one's competence in producing a written report.

**Contents:**

Practical training part of the course in national or international health care organization in accordance with personal training plan. In the fall seminars one presents the visit and in the spring seminars one presents the portfolio.

**Mode of delivery:**

Blended teaching

**Learning activities and teaching methods:**

Management reflection seminars 8 h, practical training in management (3 weeks) and independent studying 127 h.

**Target group:**

Master Degree students in health management science

**Prerequisites and co-requisites:**

None



**Recommended optional programme components:**

None

**Recommended or required reading:**

Relevant scientific articles and other literature

**Assessment methods and criteria:**

Participation in seminars. Practical training in management in Finland or abroad and producing a portfolio. The working life expert (the named tutor) gives assessment about the practical training. The student gives self-assessment at the portfolio. Read more about [assessment criteria](#) at the University of Oulu webpage.

**Grading:**

Pass / fail

**Person responsible:**

University teacher

**Working life cooperation:**

Practical training, learning assignments with working life relevance.

**353408S: Synthesis in Health Management Science Part I, 5 - 10 op**

**Opiskelumuoto:** Advanced Studies

**Laji:** Course

**Vastuuyksikkö:** Health Sciences

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

**Opettajat:** Marjo Suhonen

**Opintokohteen kielet:** Finnish

**ECTS Credits:**

5 ECTS cr

**Language of instruction:**

The language of instruction is Finnish. When needed, the course can be completed in English.

**Timing:**

Master degree studies 2nd autumn semester, 2nd period

**Learning outcomes:**

Upon completion of the course, the student is able to:

retrieve newest scientific research and create in written assignment a research-based conceptual unity of a specific field of health care using the main concepts, models and theories of health management science.

comment and reflect justifiable on the nature of health management science and both in written assignment and in oral presentation comment, compare and explain one's competence in health management in written assignment and oral presentation

analyze in written assignment one's knowledge in health management science gained earlier and consider it in relation to working life, especially to practical administration and management

present one's written assignment orally and apply digital learning methods when doing so.

**Contents:**

Knowledge of health management science in health care development and management.

**Mode of delivery:**

Blended teaching

**Learning activities and teaching methods:**

Contact teaching 14 h and independent studying 121 h.

**Target group:**

Master Degree students in health management science

**Prerequisites and co-requisites:**

None

**Recommended optional programme components:**

353409S Synthesis in Health Management Science part II

**Recommended or required reading:**

Current research

**Assessment methods and criteria:**

Active participation in contact teaching, written assignment and oral presentation. Peer evaluation and self-assessment. Read more about [assessment criteria](#) at the University of Oulu webpage.

**Grading:**

1-5 / fail. The assessment is based on individual written assignment, oral presentation and active participation at the course.

**Person responsible:**

Professor

**Working life cooperation:**

Learning assignment with health care work relevance.

**353409S: Synthesis in Health Management Science Part II, 5 op**

**Voimassaolo:** 01.08.2017 -

**Opiskelumuoto:** Advanced Studies

**Laji:** Course

**Vastuuyksikkö:** Health Sciences

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

**Opettajat:** Marjo Suhonen

**Opintokohteen kielet:** Finnish

**ECTS Credits:**

5 ECTS cr

**Language of instruction:**

The language of instruction is Finnish. When needed, the course can be completed in English.

**Timing:**

Master degree studies 2nd spring semester, 3rd period

**Learning outcomes:**

Upon completion of the course, the student is able to:

retrieve newest scientific research and create in written assignment a research-based conceptual unity of a specific field of health care using the main concepts, models and theories of health management science.

comment and reflect justifiable on the nature of health management science and both in written assignment and in oral presentation comment, compare and explain one's competence in health management at the written assignment and oral presentation

analyze in written assignment one's knowledge in health management science gained earlier and consider it in relation to working life, especially to practical administration and management

present one's written assignment orally and apply digital learning methods when doing so.

**Contents:**

Knowledge of health management science in health care development and management.

**Mode of delivery:**

Blended teaching

**Learning activities and teaching methods:**

Contact teaching 14 h and independent studying 121 h.

**Target group:**

Master Degree students in health management science

**Recommended optional programme components:**

353408S Synthesis in Health Management Science part I

**Recommended or required reading:**

Current research

**Assessment methods and criteria:**

Active participation in contact teaching, written assignment and oral presentation. Peer evaluation and self-assessment. Read more about [assessment criteria](#) at the University of Oulu webpage.

**Grading:**

1-5 / fail. The assessment is based on individual written assignment, oral presentation and active participation at the course.

**Person responsible:**

Professor

**Working life cooperation:**

Learning assignment with health care work relevance

**353410S: Master Thesis and Research Seminars, 40 op**

**Voimassaolo:** 01.08.2017 -

**Opiskelumuoto:** Advanced Studies

**Laji:** Course

**Vastuuyksikkö:** Health Sciences

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

**Opettajat:** Outi Kanste, Marjo Suhonen

**Opintokohteen kielet:** Finnish

**ECTS Credits:**

40 ECTS cr, including the following courses:

353411S Master Thesis and Research Seminars Part I (15 ECTS cr)

353412S Master Thesis and Research Seminars Part II (25 ECTS cr)

See individual courses for detailed descriptions.

**353411S: Master Thesis and Research Seminars, part I, 15 op**

**Voimassaolo:** 01.08.2017 -

**Opiskelumuoto:** Advanced Studies

**Laji:** Course

**Vastuuyksikkö:** Health Sciences

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

**Opettajat:** Outi Kanste, Marjo Suhonen

**Opintokohteen kielet:** Finnish

**ECTS Credits:**

15 ECTS cr

**Language of instruction:**

Teaching language is Finnish. If needed the course can be completed in English.

**Timing:**

Master degree studies 1<sup>st</sup> spring semester, 4th period and 2<sup>nd</sup> autumn semester, 1st period. Thesis started earlier can be continued during summer.

**Learning outcomes:**

Upon completion of the course, the student is able to

search, use, evaluate and apply independently scientific information and on that basis, produce an acceptable written research plan in Finnish or in English.

justify and present chosen topic and methodological decisions in different phases of a research process

analyze independently, orally and in small group one's own and other group members' research process and its different phases and also evaluate them critically

search information and evaluate analytically and systematically its relevance in one's research plan.

apply team work skills, flexibility and negotiation skills

justify critically and plausibly one's research topic with working life relevance, plan and create independently acceptable research plan

analyze and give feedback on peer research plan using information and communication technology.

#### **Contents:**

Idea paper, agreement of supervision, drafting an idea paper and a research plan. Working in scientific online peer groups, which includes on-line assignments, independent work. Scientific group discussions and peer-evaluation of research plan.

#### **Mode of delivery:**

Individual tutoring in scientific working group using information and communication technology.

#### **Learning activities and teaching methods:**

Contact teaching 2 h, working in scientific working group 2 h, working in online peer groups applying digital leaning methods, which includes preliminary assignments to scientific working group 10 h, reading and retrieving of the literature/research data, writing idea paper and research plan 391 h. The course uses web-based learning environment.

#### **Target group:**

Master Degree students in health management science

#### **Prerequisites and co-requisites:**

The student must have completed all research methodology studies included in the Bachelor degree and Master's degree as well as Bachelor Thesis.

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

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

Current research and literature on research methodology.

Polit D F & Beck CT 2011. Nursing research: generating and assessing evidence for nursing practice. 9. ed. Wolters Kluwer Health/Lippincott Williams & Wilkins, Philadelphia.

Denzin & Lincoln (2011, 2017). The SAGE Handbook of Qualitative Research. Sage Handbooks.

#### **Assessment methods and criteria:**

Discussions of topic/idea of the thesis will take place in May. On the basis of the discussions the student will be able to rework one's thesis also during summer. The student will prepare the thesis either alone or with another student under supervision of 1 - 2 teachers. Continuous assessment is applied in the course. Read more about [assessment criteria](#) at the University of Oulu webpage.

#### **Grading:**

1-5 / fail, continuous evaluation, self- and peer-assessment

#### **Person responsible:**

University lecturer and professor

#### **Working life cooperation:**

Topic of the thesis related to health care and with working life relevance will be discussed and chosen in collaboration with representation from working life.

### **353412S: Master Thesis and Research Seminars, part II, 25 op**

**Voimassaolo:** 01.08.2017 -

**Opiskelumotto:** Advanced Studies

**Laji:** Diploma thesis

**Vastuuyksikkö:** Health Sciences

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

**Opettajat:** Marjo Suhonen

**Opintokohteen kielet:** Finnish

**ECTS Credits:**

25 ECTS cr

**Language of instruction:**

Teaching language is Finnish. If needed the course can be completed in English.

**Timing:**

Master degree studies 2<sup>nd</sup> autumn semester, 2<sup>nd</sup> period and 2<sup>nd</sup> spring semester, 3<sup>rd</sup> period

**Learning outcomes:**

Upon completion of the course, the student is able to

prepare independently or as a member of a research group thesis or scientific article and while doing so, as an expert, apply and analyze information and skills on research methodology gained during one's studies

based on one's expertise produce a thesis with working life relevance on schedule agreed on in agreement of supervision.

master research methods she/he has used in her/his thesis, reason analytically and solve problems

evaluate and draft conclusions critically and justify decisions made within one's thesis as well as during the tutor groups

participate in scientific discussions and get readiness for postgraduate studies.

**Contents:**

International scientific research related to the topic and research methods of the Master Thesis. Producing a Master thesis or a scientific article in accordance with criteria set for scientific research. Critical discussion on thesis and presentation of results and conclusions.

**Mode of delivery:**

Individual tutoring in scientific small groups and working in online peer-groups utilizing information and communication technologies.

**Learning activities and teaching methods:**

Tutoring in groups 6 h, and working in peer groups 20 h, reading and retrieving of the literature/research data, writing of thesis or an article 649 h. The course uses web-based learning environment.

**Target group:**

Master Degree students in health management science

**Prerequisites and co-requisites:**

The student must have completed with pass 353411S Master thesis and research seminar, part I 15 ECTS cr.

**Recommended optional programme components:**

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**Recommended or required reading:**

Current research and literature on research methodology.

Polit D F & Beck CT 2011. Nursing research: generating and assessing evidence for nursing practice. 9. ed. Wolters Kluwer Health/Lippincott Williams & Wilkins, Philadelphia.

Denzin & Lincoln (2011, 2017). The SAGE Handbook of Qualitative Research. Sage Handbooks.

**Assessment methods and criteria:**

Individual work or work in pairs under supervision of one to two supervisors. When agreed on separately, the Master thesis can also be produced in form of a scientific article. Continuous assessment is applied in the course. If the student hasn't completed written maturity test in connection with the Bachelor's thesis, the written maturity test has to be completed in connection with the Master thesis. Read more about [assessment criteria](#) at the University of Oulu webpage.

**Grading:**

1-5 / fail

**Person responsible:**

Professor, University lecturer

**Working life cooperation:**

The student is able to produce a thesis that has working life relevance and supports student's own expertise. Collaboration with working life during the data collection phase.

**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 [general instructions](#) 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 [assessment criteria](#) 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

**353203S: The Application of Research Methods in Health Sciences, 10 op**

**Opiskelumuoto:** Advanced Studies

**Laji:** Course

**Vastuuyksikkö:** Health Sciences

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

**Opettajat:** Outi Kanste, Heidi Siira

**Opintokohteen oppimateriaali:**

**Polit, Denise F.** , , 2004, pakollinen

**Paunonen, M. & Vehviläinen-Julkunen, K.** , , 1997, pakollinen

**Morse, Janice M.** , , 1995, pakollinen

**Janhonen, S & Nikkonen, M** , , 2003, pakollinen

**Karma, Kai** , , 1990, pakollinen

**Perttula J. & Latomaa T** , , 2005, pakollinen

**Opintokohteen kielet:** Finnish

**ECTS Credits:**

10 ECTS cr

**Language of instruction:**

Finnish

**Timing:**

Master degree studies, 1st autumn term, 1st and 2nd period

**Learning outcomes:**

Upon completion of the course the student is able to apply in learning assignment one's previous knowledge of research methods.

The student is able to discriminate between and interpret characteristics of quantitative and qualitative research and draw conclusions on main methodological issues.

The student is able to plan and lead activities of one's tutorial group for reaching a joint goal.

The student is able to plan, create and evaluate different approaches of qualitative and quantitative research in research plan and in preparation of digital learning assignments.

The student is able to organize different stages of a research process and form a logical whole of them.

The student is able to analyze reliability and ethical questions of quantitative and qualitative research and evaluate them in one's research plan and learning assignment.

The student is able to use work-related digital skills in preparation of the research plan and learning assignments.

The student has gained skills and knowledge necessary for completion of research seminars and Master's thesis.

**Contents:**

Methodological characteristics of quantitative and qualitative research, types of/approaches in research, phases of research process, assessment of reliability, ethical issues in research. Collective implementation of learning assignments and research plan using digital learning solutions.

**Mode of delivery:**

Collective learning, learning diary (blog), peer and group evaluation

**Learning activities and teaching methods:**

Lectures and tutored exercises 40 h, independent and collective studying 20 h. Writing of a research plan and learning assignments in groups based on topics with working life relevance and using digital skills 210 h.

**Target group:**

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

**Prerequisites and co-requisites:**

The student must have completed with pass research method studies included in the Bachelor degree and Bachelor thesis.

**Recommended optional programme components:**

This course is an independent entity and doesn't require completion of other simultaneous studies.

**Recommended or required reading:**

Polit DF & Beck CT (2011) Nursing research: generating and assessing evidence for nursing practice. 9. ed. Wolters Kluwer Health/Lippincott Williams & Wilkins, Philadelphia.

Denzin, Norman K. & Lincoln, Yvonna S. (eds.) 2011. The sage Handbook of Qualitative Research. 4th ed. Thousand Oaks, CA: SAGE. (Soveltuvin osin, ainakin osat III /Strategies of Inquiry/ ja IV /Methods of Collecting and Analyzing Empirical Materials/)

National and international literature and scientific articles relevant to research plan and learning assignments.

**Assessment methods and criteria:**

Active participation in lectures, collective group work and preparation of learning assignments and research plan. Read more about [assessment criteria](#) at the University of Oulu webpage.

**Grading:**

1-5 / fail, group- and peer-evaluation

**Person responsible:**

University lecturers of nursing science and health management science

**Working life cooperation:**

During the course the students use and apply digital learning solutions relevant for working life cooperation.

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

**Opiskelumuoto:** Advanced Studies

**Laji:** Course

**Vastuuyksikkö:** Health Sciences

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

**Opintokohteen kielet:** Finnish

**Required proficiency level:**

In order to participate, student must have completed all the courses included in A500105 Knowledge Management and Research totaling 10 ECTS cr.

**ECTS Credits:**

5 ECTS cr

**Language of instruction:**

Finnish

**Timing:**

Master degree studies, 1<sup>st</sup> autumn term 1<sup>st</sup> 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 28h, group exercises 21h and learning assignments.

**Target group:**

From 2017 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:**

Final examination, accepted learning assignments and participation in group exercises  
Read more about [assessment criteria](#) at the University of Oulu webpage.

**Grading:**

Pass / fail

**Person responsible:**

University lecturer Pentti Nieminen