Public Health - master  (120 ECTS)

Programme description

Department of Community Medicine
Faculty of Health Sciences
UiT The Arctic University of Norway

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1 INTRODUCTION .............................................................................................................. 3
  1.1 Target Group ................................................................................................................. 3
  1.2 Admission Requirements .............................................................................................. 3
  1.3 Job prospects .................................................................................................................. 4
  1.4 Language of teaching and examination ....................................................................... 4
  1.5 International students .................................................................................................... 4
2 OBJECTIVES OF THE PROGRAMME .............................................................................. 5
3 ORGANIZATION AND STRUCTURE ............................................................................... 6
  3.1 Programme structure ...................................................................................................... 6
4 CONTENTS ......................................................................................................................... 7
5 APPROACH TO TEACHING AND LEARNING ............................................................. 8
6 EXAM AND ASSESSMENT ................................................................................................. 9
  Examination overview: ....................................................................................................... 10
1 INTRODUCTION

Public health is the field of medicine that is concerned with the health of the community as a whole. Given the many definitions and description of this subject of public health, it is worth to remind a century old definition that was recently cited in BMJ:

/Public health is the Science and Art of preventing disease, prolonging life, and promoting health and efficiency through organized community effort for sanitation of the environment, the control of communicable disease, the education of the individual in personal hygiene, the organization of medical and nursing services for early diagnosis and preventive treatment of disease, and the development of the social machinery to insure everyone a standard of living adequate for maintenance of health, so organizing these benefits as to enable every citizen to realize his birth right of health and longevity“ (BMJ 2012;345:e5466)

In short, public health is concerned with understanding the determinants of (ill) health, and in identifying effective interventions for the purpose of improving population health. Important subject fields are biostatistics, epidemiology and health economics.

Completion of the Master’s Degree Programme in Public Health qualifies for the degree Master of Public Health. The programme consists of 120 credits (ECTS) in total.

1.1 Target Group

The Master of Public Health programme provides you with a range of skills that are in high demand. You will be able to advice on: how can society intervene to prevent ill health?. In which ways will changes in the disease pattern affect healthcare resource use? How should the given healthcare resources be prioritized to best achieve policy objectives?

The programme is aimed at students who hold a bachelor’s, or higher degree in health- or medical sciences (e.g. nursing, medicine, physiotherapy, psychology, health administration), and students with sufficient qualifications within the disciplines included in the MPH-programme, such as in social sciences, economics, statistics or science.

1.2 Admission Requirements

Admission to the Master's programme in Public Health requires a Bachelor’s degree (180 ECTS credits) in Health Sciences, Social Sciences or Natural Sciences, or equivalent qualification. For students who hold a Bachelor’s degree in Social Sciences or Natural Sciences, the degree must contain a minimum 80 ECTS (or equivalent) within the fields specific to the Master's degree programme in Public Health; epidemiology, health economics, biostatistics, health sociology, global- and environmental health.

The minimum average grade requirement is:

- C - for bachelor’s degree or equivalent issued in Europe, Canada, USA, Australia and New Zealand
- B - for bachelor’s degree or equivalent issued in all other countries

Applicants will be ranked by the Admission committee for the Master Public Health programme, and up to 30 qualified applicants will be admitted.
The students must have English language skills enabling them to read scientific literature and understand the lectures – all of which are given in English. The students must master the use of a computer and have access to a PC, MacBook or laptop with internet connection. Self-financing international students must also fulfill any admission requirements set by the central administration of UiT. See: https://uit.no/

1.3 Job prospectives

This master’s degree is equivalent to the English degree Master of Public Health (MPH) which is a highly recognized degree. The degree qualifies for leading positions in the health services; hospitals, community care, and governmental offices concerned with health planning, health promotion and prevention and regulations. There is a growing demand for the qualifications that a Master’s degree of Public Health provides. An MPH also provides highly relevant knowledge for international health work. The degree also qualifies for admission to doctoral degree programmes.

1.4 Language of teaching and examination

All courses are taught in English, but the written assignments and exams may also be answered in Norwegian, Danish or Swedish.

1.5 International students

The master’s programme is accepting self-financing international students. The number of international students varies between a third and half of our programme students. It is an important goal for the Department to maintain this international study environment.

The Department has active student exchange programmes with foreign universities, including Ludwig-Maximilians-Universität München, Tbilisi State University and University of Georgia. UiT also has a vast network of open exchange agreements.

Courses from other universities need to be approved in advance if they are to be incorporated into the Master of Public Health programme.
2 OBJECTIVES OF THE PROGRAMME

After completing the study, it is expected that students will be able to:

Knowledge:
- Reflect critically on social and cultural aspects of health, illness and health service
- Identify and analyse central ethical challenges in public health
- Explain the main causes of global health inequalities

Skills:
- Advice policy makers on interventions that affect population health
- Apply health economic principles in the design of financing mechanism for hospitals and primary care providers
- Analyse the cost-effectiveness of alternative uses of healthcare resources, and make systematic comparisons for the purpose of priority setting
- Critically evaluate the methodology of scientific publications in public health
- Apply the principles of evidence-based medicine and independently assess the knowledge base for interventions
- Use a set of epidemiological methods in the analysis of health-related issues

Competence:
- Critically assess the effectiveness of various public health measures
- Plan, implement and present a research project on public health

The objective of this study programme is to make students understand and be able to identify the determinants of population health, i.e. the range of biological; environmental; social; and behavioral factors that affect the condition of health in a population, and in turn which factors that affect the observed inequalities in health. Furthermore, the objective is to make students capable of judging different measures that can improve people’s health, and reduce health inequalities.

It is essential that students learn to apply relevant theories and methods for analysing basic health questions. Much emphasis is placed on learning to master the quantitative research methods. After completing this programme students should be able to map disease and health in a population and identify the social factors that affect health. They should be able to assess and initiate preventive health measures, evaluate the impact of health related measures and give an account of adequate solutions regarding allocations of resources.

The programme consists of nine courses, each of which has 10 credits (ECTS). Six courses are mandatory and three elective, chosen from a list of at least four alternative elective courses.
3 ORGANIZATION AND STRUCTURE

The master programme in public health is a programme of 120 credits (ECTS) in total. The programme consists of an academic training component which in total consists of 90 credits (ECTS) and a master’s degree thesis of 30 credits (ECTS).

3.1 Programme structure

<table>
<thead>
<tr>
<th>Term</th>
<th>10 ECTS</th>
<th>10 ECTS</th>
<th>10 ECTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st term (autumn)</td>
<td>HEL-3005 Society, culture and public health</td>
<td>HEL-3006 Introduction to epidemiology and biostatistics</td>
<td>HEL-3007 Health economics and policy</td>
</tr>
<tr>
<td>2nd term (spring)</td>
<td>HEL-3070 Biostatistics II</td>
<td>HEL-3030 International and environmental health</td>
<td>HEL-3055 Health technology assessment and medical decision-making</td>
</tr>
<tr>
<td>3rd term (autumn)</td>
<td>Students must choose three courses from any of the four elective courses, or go on exchange.</td>
<td>Elective: HEL-3034 Global Health</td>
<td>Elective: HEL-3008 Public Health Ethics</td>
</tr>
<tr>
<td>4th term (spring)</td>
<td>HEL-3950 Master’s thesis in Public Health</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The academic training component is divided into two parts. One part consists of the core courses, while the other part consists of elective courses. The core courses comprise 60 credits (ECTS) in total. The elective courses that are currently provided lie within the fields of epidemiology, global health, public health ethics, and protocol development.

It is also possible to have courses/modules which are offered by other universities incorporated in the master degree. These courses/modules must be recognized academically equal to the ones offered at UiT the Arctic University of Norway, and this must be approved in advance.

In the first semester, students are introduced to the important methodologies of public health; biostatistics and epidemiology. The other courses this semester give the theoretical framework for critical reflections of social and cultural aspects of public health, as well as an understanding of methodologies used within health economics and policy. The second semester courses are regarded as fundamental in the study area of public health, and are therefore mandatory courses: biostatistics, international health, health technology assessment and decision-making.

The third semester consists of elective courses, or students can apply for exchange.

**Master’s thesis**

Although the thesis writing has been allocated to the 4th semester, the student will start their initial work on the thesis already in the 2nd semester. The programme offers two seminars, one in each of the first two semesters, to prepare students for their thesis writing. The first semester seminar is mainly concerned with challenges regarding how to approach such a research project. The following seminar will focus on the choice of topic, as well as method and the writing of the thesis.

In addition, the third semester elective course HEL-3066 Protocol Development for MPH Thesis, will advice, train and prepare attending students for the master thesis.

Throughout the thesis the student needs to demonstrate that they can apply relevant methods which have been dealt with during the programme. The thesis is carried out as a research project and would often be based on the analyses of an existing data set, or it might be a discussion of topic based on literature reviews. The master’s thesis needs to reflect the student’s ability to work individually. It also needs to reflect understanding, independent thinking and maturity within the given field of study. If a student wishes to use qualitative methodology, it may be granted by individual application. In this application the student must document adequate formal qualifications in qualitative methodology.

The master’s thesis can be written individually or by a group of two persons. If two students choose to collaborate, they must apply for this and be able to account for each individual’s contribution.

The length of the thesis will depend on the subject and form, but it should be between 30 and 60 pages references and notes included. When two students write a thesis together the scope of the thesis should be between 80 and 100 pages references and notes included. There are specific guidelines for writing the master’s thesis, available in the course description HEL-3950, and in a thesis writing description available in the UiT learning management system.
The student and the academic supervisor must sign a contract of supervision when the draft protocol or project description has been developed. Both seminars and individual supervision are included in the academic supervision. More information about the academic supervision itself can be found in the course descriptions for the master thesis.

The master programme ends with the handing-in of the master thesis. Master’s thesis hand-in deadline:

**Spring term:** May 15

The master thesis is evaluated by an external and an internal examiner. The grade scale used is five steps from A-E for an exam that is passed, and F for fail. The evaluation committee will be able to confer with the academic supervisor before they meet to evaluate the thesis. The deadline for grading the thesis is six weeks after submission; an additional two days may be added on administrative grounds.

### 5 APPROACH TO TEACHING AND LEARNING

The teaching consists of lectures, seminars, group work and supervision. The students themselves are encouraged to initiate the forming of study groups.

The teaching will consist of teaching gatherings on campus, normally 2-3 gatherings of 3-5 days duration per course. The number and the duration of gatherings will vary according to the different courses. Please refer to individual course description for more information. The gatherings are mandatory.

The master programme will in part be based on the use of Internet and the learning management system (LMS) of UiT. This means that teaching and student work will, in part, be carried out on teaching gatherings where students and teachers meet on campus, partly in the intermediate periods where the students can work at home using the Internet and LMS resources.

The students will be given instructions in the use of the UiT learning management system. During the first gathering of each course emphasis will be put on allowing the students and teachers to get acquainted, groups will be established, and communication using the Internet will be practiced upon.

The duration of the intermediate periods will also vary. In the intermediate periods activity and interaction between the students and between the students and the teachers will be possible. A substantial amount of the learning material and the methodology will be conveyed online.

Some of the teaching/instruction will follow the principle of “problem-based learning”. To be able to complete the programme the students are required to be active and take responsibility.
6 EXAM AND ASSESSMENT

Exam
The method of examination will be determined for each course. The Department of Community Medicine primarily uses the following methods of evaluation:

- Home exam on a given topic
- Written school examination
- Digital school examination
- Master Thesis

The home exams may for instance be to solve a task by the means of calculation and interpret the results, to assess an article or to write an essay.

The obligatory assignments will be assessed as Approved or Not Approved.

Attendance is regarded as an obligatory exercise. This is specified in each course description. All obligatory assignments must be approved in order to take the exam(s).

All the elements/modules (attendance, obligatory assignments and exams) of a course must be passed before a student has passed the course as a whole. The basis for each final grade can be found in the respective course descriptions. Both school- and home-exams are evaluated on a scale from A to E for pass and F for fail. Information about re-sit examination can be found in the individual course descriptions.

Before the student can submit the master thesis, an adequate number of courses comprising in total 90 credits must have been passed. The master thesis is also evaluated according to a grade scale, with A-E for pass and F for fail.

More information about the different methods of evaluation can be found in the different course descriptions. Students can write assignments and examinations in Norwegian, Swedish, Danish or English.

Grading scale table:

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Designation</th>
<th>General, qualitative descriptions of the assessment criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Excellent</td>
<td>An excellent performance, clearly outstanding. The candidate demonstrates excellent judgement and a very high degree of independent thinking.</td>
</tr>
<tr>
<td>B</td>
<td>Very good</td>
<td>A very good performance. The candidate demonstrates sound judgement and a high degree of independent thinking.</td>
</tr>
<tr>
<td>C</td>
<td>Good</td>
<td>A good performance in most areas. The candidate demonstrates a reasonable degree judgement and independent thinking.</td>
</tr>
<tr>
<td>D</td>
<td>Satisfactory</td>
<td>A satisfactory performance, but with significant shortcomings. The candidate demonstrates a limited degree of judgement and independent thinking.</td>
</tr>
<tr>
<td>E</td>
<td>Sufficient</td>
<td>A performance that meets the minimum criteria, but no more. The candidate demonstrates a very limited degree of judgement and independent thinking.</td>
</tr>
<tr>
<td>F</td>
<td>Fail</td>
<td>A performance that does not meet the minimum academic criteria. The candidate demonstrates an absence of both judgement and independent thinking.</td>
</tr>
</tbody>
</table>
**Examination overview:**

### 1<sup>st</sup> semester:

<table>
<thead>
<tr>
<th>Code</th>
<th>Course</th>
<th>ECTS</th>
<th>Form of examination</th>
<th>Duration</th>
<th>Grading</th>
<th>Obligatory assignment*</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEL-3005</td>
<td>Society, culture and public health</td>
<td>10 ECTS</td>
<td>Individual, written home based exam.</td>
<td>1 week</td>
<td>A-F</td>
<td>Written home assignment. One week, 2000-3000 words.</td>
</tr>
<tr>
<td>HEL-3006</td>
<td>Introduction to Epidemiology and Biostatistics</td>
<td>10 ECTS</td>
<td>Individual, written digital school exam.</td>
<td>6 hours</td>
<td>A-F</td>
<td>2 individual written home assignments. Two weeks, &lt;3500 words.</td>
</tr>
<tr>
<td>HEL-3007</td>
<td>Health Economics and Policy</td>
<td>10 ECTS</td>
<td>Individual, written school exam.</td>
<td>6 hours</td>
<td>A-F</td>
<td>Group, plenary presentation, 30mins.</td>
</tr>
</tbody>
</table>

### 2<sup>nd</sup> semester:

<table>
<thead>
<tr>
<th>Code</th>
<th>Course</th>
<th>ECTS</th>
<th>Form of examination</th>
<th>Duration</th>
<th>Grading</th>
<th>Obligatory assignment*</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEL-3070</td>
<td>Biostatistics II</td>
<td>10 ECTS</td>
<td>Individual, written digital school exam.</td>
<td>6 hours</td>
<td>A-F</td>
<td>2 home assignments, 2 weeks each.</td>
</tr>
<tr>
<td>HEL-3030</td>
<td>International and Environmental Health</td>
<td>10 ECTS</td>
<td>Individual, written home based exam.</td>
<td>2 weeks</td>
<td>A-F</td>
<td>3 written home assignments. 8 days. &lt;2000 words.</td>
</tr>
<tr>
<td>HEL-3055</td>
<td>Health Technology Assessment and Medical Decision-making</td>
<td>10 ECTS</td>
<td>Individual, written home based exam.</td>
<td>1 week</td>
<td>A-F</td>
<td>Written home assignment, 1 week, 2000-2500 words.</td>
</tr>
</tbody>
</table>
3rd semester:

3 of the following 4 elective courses:

<table>
<thead>
<tr>
<th>Code</th>
<th>Course</th>
<th>ECTS</th>
<th>Form of examination</th>
<th>Duration</th>
<th>Grading</th>
<th>Obligatory assignment*</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEL-3066</td>
<td>Protocol Development for MPH Thesis</td>
<td>10 ECTS</td>
<td>Individual, written home based exam.</td>
<td>3 weeks</td>
<td>Pass / Fail</td>
<td>2 individual written home assignments.</td>
</tr>
<tr>
<td>HEL-3060</td>
<td>Epidemiology II</td>
<td>10 ECTS</td>
<td>Individual, written home based exam.</td>
<td>12 days</td>
<td>A-F</td>
<td>2 individual written home assignments. 1500-2000 words. 2 weeks each.</td>
</tr>
<tr>
<td>HEL-3034</td>
<td>Global Health</td>
<td>10 ECTS</td>
<td>Individual, written home based exam.</td>
<td>1 week</td>
<td>A-F</td>
<td>1 individual written home assignment. One week, 2500 words.</td>
</tr>
<tr>
<td>HEL-3008</td>
<td>Ethics</td>
<td>10 ECTS</td>
<td>Individual, written home based exam.</td>
<td>4 days</td>
<td>A-F</td>
<td>1 written home assignments.</td>
</tr>
</tbody>
</table>

4th semester:

<table>
<thead>
<tr>
<th>Code</th>
<th>Course</th>
<th>ECTS</th>
<th>Form of examination</th>
<th>Duration</th>
<th>Grading</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEL-3950</td>
<td>Master's Thesis in Public Health</td>
<td>30 ECTS</td>
<td>Written home based exam.</td>
<td>4 months</td>
<td>A-F</td>
</tr>
</tbody>
</table>

*Attendance to lectures and seminars are mandatory in all courses.