



**Karolinska
Institutet**

Programme syllabus for

Master's Programme in Public Health Sciences, 120 credits

Masterprogrammet i folkhälsovetenskap, 120 hp

Basic programme information

Programme code	4FH11
Name of the programme	Master's Programme in Public Health Sciences
Specialisations	<p>The programme has two specialisations:</p> <ul style="list-style-type: none">• Public Health Epidemiology• Health Economics, Policy and Management
Number of credits	120.0 credits (120.0 ECTS credits)
Starting date	The syllabus applies to students who commence their studies in or after autumn 2011.
	Approved revisions of the syllabus are described under the heading Transitional Provisions.
Decision date	2010-11-09
Decided by	Board of Higher Education
Last revision	2015-06-11
Revised by	Board of Higher Education
Reference number	3-1769/2015
Specific eligibility requirements	A Bachelors degree or a professional degree equivalent to a Swedish Bachelors degree of at least 180 credits in public health science, healthcare or other relevant social sciences subject area. And proficiency in English equivalent to English B/English 6.
Main field of study	Public Health Sciences
Qualification	Medicine masterexamen med huvudområdet folkhälsovetenskap <i>Degree of Master of Medical Science (120 credits) with a Major in Public Health Sciences</i>
	Upon request, a student who meets the requirements for a qualification is to receive a diploma.

Outcomes

Outcomes of second cycle education according to the Higher Education Act

Second-cycle courses and study programmes shall be based fundamentally on the knowledge acquired by students during first-cycle courses and study programmes, or its equivalent.

Second-cycle courses and study programmes shall involve the acquisition of specialist knowledge, competence and skills in relation to first-cycle courses and study programmes and in addition to the requirements for first-cycle courses and study programmes shall:

- further develop the ability of students to integrate and make autonomous use of their knowledge
- develop the students' ability to deal with complex phenomena, issues and situations, and
- develop the students' potential for professional activities that demand considerable autonomy, or for research and development work.

Outcomes of the Degree of Master (120 credits) according to the Higher Education Ordinance

Knowledge and understanding

For a Degree of Master the student shall:

- demonstrate knowledge and understanding in the main field of study, including both broad knowledge of the field and a considerable degree of specialised knowledge in certain areas of the field as well as insight into current research and development work, and
- demonstrate specialised methodological knowledge in the main field of study.

Competence and skills

For a Degree of Master the student shall:

- demonstrate the ability to critically and systematically integrate knowledge and analyse, assess and deal with complex phenomena, issues and situations even with limited information
- demonstrate the ability to identify and formulate issues critically, autonomously and creatively as well as to plan and, using appropriate methods, undertake advanced tasks within predetermined time frames and so contribute to the formation of knowledge as well as the ability to evaluate this work
- demonstrate the ability in speech and writing both nationally and internationally to report clearly and discuss his or her conclusions and the knowledge and arguments on which they are based in dialogue with different audiences, and
- demonstrate the skills required for participation in research and development work or autonomous employment in some other qualified capacity.

Judgement and approach

For a Degree of Master the student shall:

- demonstrate the ability to make assessments in the main field of study informed by relevant disciplinary, social and ethical issues and also to demonstrate awareness of ethical aspects of research and development work
- demonstrate insight into the possibilities and limitations of research, its role in society and the responsibility of the individual for how it is used, and
- demonstrate the ability to identify the personal need for further knowledge and take responsibility for his or her ongoing learning.

Outcomes of the study programme at Karolinska Institutet

In addition to the national objectives for a Degree of Master, the following outcomes apply for the Master's Programme in Public Health Sciences at Karolinska Institutet.

On completion of the programme, students shall:

- demonstrate deeper knowledge of the determining factors of ill-health, and how these affect public health,
- demonstrate deeper skills in using public health science methods in public health promotion work,
- demonstrate deeper knowledge of applying theories and models in connection with public health science analyses and action-based work within a chosen specialisation, and
- demonstrate an ability to compile, critically evaluate and present data collated by the students themselves.

Content and structure

The programme offers courses which, in their scope and progression, enable students to meet the requirements of a Degree of Master of Medical Science with a Major in Public Health Sciences within a chosen area of specialisation. The programme forms an educational basis for postgraduate research training in public health sciences.

Specialisations

The programme has two specialisations with separate admission. Both specialisations provide a general introduction to public health sciences, as well as basic and deeper knowledge within each specialisation's area of knowledge. The programme also prepares students for research, including both quantitative and qualitative research methods.

Public Health Epidemiology

The specialisation in public health epidemiology provides knowledge of epidemiological methods that are relevant within public health sciences. Students obtain qualified knowledge of epidemiological and biostatistical methods, data management, and methods for outcome evaluation of public health measures. The emphasis is on applied epidemiology, in order to develop students' skills in describing, analysing and reflecting on various public health issues, and in critically reviewing epidemiological studies.

Health Economics, Policy and Management

The specialisation in health economics, policy and management provides students with basic and deeper knowledge of health economics, health and medical care systems and policy, operational management within health and medical care including public health work. Implementation and evaluation research is addressed.

Courses

The programme studies begin with a joint introductory course in public health sciences. A joint course in philosophy of science is also given during semester 3. Apart from that the studies are pursued within each specialisation and conclude with a degree project worth 30 higher education credits during semester 4.

The public health epidemiology specialisation is organised around the three core areas of epidemiology: monitoring and describing the prevalence of disease, often termed distribution of health; analyses of the causes of disease and health, i.e. the determinants of health; and assessment of the outcomes of public health programmes and policies, outcome evaluation. During semesters 1 and 2, courses provide the basic epidemiological and biostatistical knowledge and skills. During the first year there is also a course on qualitative research methodology and another on data management, i.e. collecting and organizing data. During semester 3, the theoretical knowledge and practical skills are further enhanced in three advanced applied epidemiology courses.

During semesters 1 and 2, the specialisation in health economics, policy and management provides students with basic knowledge within the specialisation's subject areas. The themes discussed are health planning, health systems, financing health and medical care, economic evaluation and methods for management and control. Students are also offered a course in research methods and ethics, adapted in accordance with the subject areas. During semester 3, students apply and deepen their knowledge with the subject areas. They study global health systems and global health policy, modelling economic evaluation, methods for assessing effectiveness and productivity, the application of industrial economics and logistics on health and medical care, and strategic management.

Transitional provisions

Students admitted to the track of *Public Health Epidemiology* follow the syllabus in accordance with the year of their admittance.

Other guidelines

Grading scale

The grades used are Fail, Pass or Pass with Distinction. Alternative grading scales may apply to elective courses or cross-programme courses. The grading scale is detailed in the course syllabus.

Language of instruction

The teaching language is English.

Specific eligibility requirements within the programme

In order to proceed to semester 3, a student must have passed courses corresponding to 45 higher education credits on the specific specialisation within the Master's Programme in Public Health Sciences.

In addition, there may be course-specific entry requirements (see the relevant course syllabus).

Study plan with constituent courses

Public health epidemiology

For students starting the programme in 2016 or later:

Semester	Name of the course	Credits	Cycle	Depth of the course
1	Introduction to Public Health Sciences	7,5	Second	AV
1	Basic statistics and computer based statistic analysis	7,5	Second	AV
1	Methods for studying the distribution of health	7,5	Second	AV
1	Collecting and organizing data	7,5	Second	AV
2	Epidemiological methods for studying determinants of health	7,5	Second	AV
2	Advanced statistics in epidemiology	10	Second	AV
2	Qualitative methods	7,5	Second	AV
2	Applied epidemiology 1 – distribution of health	5	Second	AV
3	Applied epidemiology 2 – determinants of health	10	Second	AV
3	Epidemiological methods for outcome evaluation	10	Second	AV
3	Science – theory, practice and ethics	10	Second	AV
4	Degree Project in Public Health Sciences	30	Second	AV

For students starting the programme in 2012 or later:

Semester	Name of the course	Credits	Cycle	Depth of the course
1	Introduction to Public Health Sciences	7,5	Second	AV
1	Basic statistics and computer based statistic analysis	7,5	Second	AV
1	Methods for studying the distribution of health	7,5	Second	AV
1	Collecting and organizing data	7,5	Second	AV
2	Qualitative methods	7,5	Second	AV
2	Epidemiological methods for studying determinants of health	7,5	Second	AV
2	Advanced statistics in epidemiology	7,5	Second	AV
2	Methods for outcome evaluation of public health interventions	7,5	Second	AV
3	Applied epidemiology 1 – distribution of health	5	Second	AV
3	Applied epidemiology 2 – determinants of health	10	Second	AV
3	Applied epidemiology 3 – outcome evaluation	5	Second	AV
3	Science – theory, practice and ethics	10	Second	AV

4	Degree Project in Public Health Sciences	30	Second	AV
---	--	----	--------	----

For students starting the programme in 2011:

Semester	Name of the course	Credits	Cycle	Depth of the course
1	Introduction to public health sciences	7.5	Second	Av
1	Introduction to public health epidemiology	7.5	Second	Av
1	Methods for studying the distribution of health	7.5	Second	Av
1	Qualitative Methods	7.5	Second	Av
2	Epidemiological methods for studying determinants of health	7.5	Second	Av
2	Statistics for epidemiologists	7.5	Second	Av
2	Collecting and organizing data	7.5	Second	Av
2	Methods for outcome evaluation of public health interventions	7.5	Second	Av
3	Applied epidemiology 1 – distribution of health	5	Second	Av
3	Applied epidemiology 2 – determinants of health	10	Second	Av
3	Applied epidemiology 3 – outcome evaluation	5	Second	Av
3	Science - theory, practice and ethics	10	Second	Av
4	Degree project in public health Sciences	30	Second	Av

Health Economics, Policy and Management

Semester	Name of the course	Credits	Cycle	Depth of the course
1	Introduction to public health sciences	7.5	Second	Av
1	Planning for health	2.5	Second	Av
1	Health systems and policy	10	Second	Av
1	Health economics - financing health and medical care	10	Second	Av
2	Basic epidemiology and statistics 1	5	Second	Av
2	Health outcomes measurement	7,5	Second	Av
2	Economic evaluation of health care programmes	7,5	Second	Av
2	Health and medical care management	10	Second	Av
3	Advanced course in health economics	5	Second	Av
3	Advanced course in health systems and policy	5	Second	Av
3	Advanced course in health and medical care management	5	Second	Av
3	Science - theory, practice and ethics	10	Second	Av
4	Degree project in public health sciences	30	Second	Av

