Course syllabus for

Science - Theory, Practice and Ethics, 10 credits

Vetenskap - teori, praktik och etik, 10 hp
This course syllabus is valid from autumn 2019.
Please note that the course syllabus is available in the following versions:
Autumn2018 , Autumn2019

Course code	4FH079
Course name	Science - Theory, Practice and Ethics
Credits	10 credits
Form of Education	Higher Education, study regulation 2007
Main field of study	Public Health Sciences
Level	AV - Second cycle
Grading scale	Pass with distinction, Pass, Fail
Department	Department of Global Public Health
Participating institutions	• Department of Learning, Informatics, Management and Ethics
Decided by	Utbildningsnämnden PHS
Decision date	2018-03-29
Revised by	Education Committee GPH
Last revision	2020-03-09
Course syllabus valid from	Autumn 2019

Specific entry requirements

A Bachelor's degree or a professional degree equivalent to a Swedish Bachelor's 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.

In order to proceed to the course the student must have passed courses corresponding to 45 credits on the specific specialisation within the Master's Programme in Public Health Sciences.

Objectives

The course aim is to enable the student to reflect upon, critically assess and employ scientific methods in practice, including theoretical and ethical considerations.

On completion of the course, the student should be able to:

- compile, critically assess and synthesize scientific literature and research results

- employ basic theory of science concepts, such as realism/relativism, objectivity/situatedness, ontology/epistemology and induction/deduction
- discuss the roles of theory within public health and the links between theory and method
- describe the milestone of research ethics on human subjects, including the declaration of Helsinki and other declarations
- reflect upon and present the ethical aspects of his/her research in particular that of ethical dilemmas, i.e. situations where different ethical principles, interests and norms may come into conflict with each other
- reflect upon and present scientific work in different formats and appropriate to different target groups
- develop effective time management skills in order to meet assignment deadlines

Content

The course is divided into three parts: Scientific practice (4,0 hp), Theory of science (3,0 hp) and Ethics in research (3,0 hp).

Scientific practice, 4.0 hp

Grading scale: VU

Part 1, Scientific practice focuses on preparation for the thesis work, specifically the formulation of the introduction, background, aim and research questions. It includes prioritising references, use of theoretical frameworks and theories to visualise interrelated concepts and reflections upon public health relevance and implication. This part also covers similarities and differences between research related documents such as scientific articles, theses, reports, essays, and applications, together with training in constructive peer feedback. Ultimately, it includes training in oral and written presentations aimed at different target groups of scientific studies such as researchers, politicians, officials, media, and the general public.

Theory of science, 3.0 hp

Grading scale: VU

The part Theory of science is implemented as a mixture of lectures, reading exercises and seminars. It seeks to increase the students’ capacity to understand, analyze and critically reflect upon scientific knowledge production in the era of globalization. Theory has many meanings in a multi-disciplinary field as public health and the course will disentangle some of them. The learning outcomes are obtained by the students' acquaintance with the art of philosophical thinking, basic concepts and discussions within theory of science and their understanding how this can be employed on specified empirical cases in public health.

Ethics in research, 3.0 hp

Grading scale: VU

The part Ethics in research seeks to increase the student capacity to analyze questions related to research ethics involving human subjects. This will be attained by the students assimilating greater knowledge about the basic concepts, norms and principles of research ethics, and learning more about national and international legislation governing the subject. It includes becoming familiar with ethical declarations, codes and other instruments used as guidance principles within different medical or healthcare science research fields. The part also includes training in the identification of dilemmas in public and global health research as regards human subjects and training in writing subject information letters and standard applications for ethical review.

Teaching methods

The learning include lectures, reading and writing exercises, seminars with individual presentations and group discussions, and three individual assignments; complemented by course literature and distributed material such as scientific articles and internet publications.

Examination

Part 1 is examined through an individual assignment in three parts. One is on the student's writing of master thesis title, theoretical framework, aim and research question; the second is on the student's oral presentation of thesis title, background, aim and research questions; and the third is the student's writing of the overview of the thesis background. Part 1 is graded as Fail, Pass or Pass with Distinction.

Part 2 is examined through an individual assignment; an essay where a number of theoretical concepts are defined and employed in a critical analysis of an empirical case, related to the master thesis subject. Part 2 is graded as U/G/VG.

Part 3 is examined through an individual assignment in two parts. One is on the student's own research project and covers a number of key questions in the ethical review process; the other one is the student's reflection on the ethical dilemmas of the project of another student. Part 3 is graded as Fail, Pass or Pass with Distinction.

Grade
The grade of the whole course is based on the assignments from each of the three parts. To obtain Pass with Distinction the assignments from all three parts should be graded Pass with Distinction. To obtain Pass with Distinction all assignments are completed on time and no 'revision required' received during the grading process.

Compulsory attendance
Attendance and active participation at the seminars, alongside accomplishment of the three individual assignments with grade G, are compulsory. The course leader decides if and how absence from compulsory activities can be compensated. When the student has participated in and accomplished every compulsory part, or compensated absence in accordance with the course leader's instructions, the grades for all parts are registered in LADOK.

Limitation of number of occasions to write the exam

The student has the right to write the exam six times. If the student has not passed the exam after four participations he/she is encouraged to visit the study advisor.
The number of times that the student has participated in one and the same examination is regarded as an examination session. Submission of a blank examination is regarded as an examination. An examination for which the student registered but not participated in will not be counted as an examination.

If there are special grounds, or a need for adaptation for a student with a disability, the examiner may decide to deviate from the syllabus's regulations on the examination form, the number of examination opportunities, the possibility of supplementation or exemptions from the compulsory section/s of the course etc. Content and learning outcomes as well as the level of expected skills, knowledge and abilities may not be changed, removed or reduced.

Transitional provisions

The course has been cancelled and was offered for the last time in the fall semester of 2019.
Examination will be provided until the spring semester of 2022 for students who have not completed the course.

Other directives

The course language is English.

Course evaluation will be carried out in accordance with the guidelines established by the Committee for Higher Education.

Literature and other teaching aids

Mandatory literature

Part 1, Scientific practice

Koch, Lene.; Vallgårda, Signild
Research methods in public health

1. edition. : Copenhagen : Gyldendal Akademisk, 2008. - 298 p.
ISBN:978-87-628-0794-5 LIBRIS-ID:12334668
Library search

Part 3, Ethics in research

Ethics and epidemiology
Coughlin, Steven S.; Beauchamp, Tom L.; Weed, Douglas L.

2. ed. : Oxford : Oxford University Press, 2009 - xi, 315 p.
ISBN:978-0-19-532293-4 (alk. paper) LIBRIS-ID:11489508
Library search

Scientific articles and internet publications will be added

Recommended literature

Hofmann, Angelika H.
Scientific writing and communication : papers, proposals, and presentations

2. uppl. : New York : Oxford University Press, 2014 - 726 p.
ISBN:9780199947560 LIBRIS-ID:16966223
Library search

Kuhn, Thomas S.
The structure of scientific revolutions

3. ed. : Chicago, Ill. : University of Chicago Press, 1996 - xiv, 212 s.
ISBN:0-226-45807-5 (inb.) LIBRIS-ID:4718165
Library search

Part 3, Ethics in research

Coughlin, Steven Scott
Ethics in Epidemiology and Public Health Practice (2nd Edition)

APHA Press, 2009
LIBRIS-ID:14970823

Loue, Sana.
Textbook of research ethics : theory and practice

New York : Kluwer Academic, c2002. - xx, 276 p.
LIBRIS-ID:9780939

Scientific articles and internet publications will be added