



**Karolinska  
Institutet**

Course syllabus for

# **Applied Epidemiology 2 - Determinants of Health, 14 credits**

Tillämpad epidemiologi 2 - sjukdomars bestämningsfaktorer, 14 hp

This course syllabus is valid from autumn 2020.

Please note that the course syllabus is available in the following versions:

Autumn2020 , [Autumn2021](#) , [Autumn2024](#)

Course code	4FH095
Course name	Applied Epidemiology 2 - Determinants of Health
Credits	14 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
Decided by	Utbildningsnämnden PHS
Decision date	2018-11-09
Revised by	Education Committee GPH
Last revision	2020-03-09
Course syllabus valid from	Autumn 2020

## **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.

That the student has completed courses with approved results equivalent of 45 credits at the Master's Programme in Public Health Sciences, specialisation Public Health Epidemiology.

## **Objectives**

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

- identify and account for how determinants for public health problems are studied and be able to reflect and account for strengths and weaknesses in different study designs.
- identify and account for the specific requirements that can be set on the design when studying determinants of health in different contexts.

- compile and critically review current scientific literature, with regard to determinants for public health problems, and be able to communicate knowledge of the determinants of diseases.
- carry out and interpret statistical analyses of population based data to describe determinants for health.

## Content

During the course, comprehensive presentations will be made of how to apply different epidemiological methods to study different issues, in practice, when it comes to determinants for public health diseases. The course comprises determinants in a broad perspective, from micro to macro level. Different methodologies will be described, for example twin studies and nested case-control. Statistical methods applicable for the study of determinants will be presented. The teaching will to a large extent be based on current research projects. Strong emphasis will be given on methods for studies in different populations and institutional settings.

## Teaching methods

The course consists of lectures, literature studies, individual work and group assignments. The student shall create a portfolio consisting of written presentations. The assignments for the portfolio consist of questions that should be answered with support of data analyses, lectures, seminars and literature. During the course, the student shall present their work orally. For the oral presentations the student should prepare questions that should be discussed in the group.

## Examination

During the course assignments should be submitted in writing to the course director. Grading criteria will be distributed along with the assignments. The grade is weighted by the tasks, information about this is given in the beginning of the course. The final grading is based on a summary of all assignments. The grades used are fail, pass, pass with distinction in six of the assignments, one is graded fail or pass.

### Compulsory parts

Compulsory attendance at seminars. Absence is compensated by additional written assignment concerning the part of the course that the absence applies to. The assignment is submitted no later than 3 weeks after the day of absence to the course coordinator. The examiner assesses if and how absence from compulsory parts can be compensated. Before the student has participated in compulsory parts or compensated absence in accordance with the examiner's instructions, the student's results for the course/respective part will not be registered. Absence from a compulsory part may result in the student having to wait to compensate until the next time the course is given.

### Limitation of number of occasions to write the exam

Students who have not passed the regular examination are entitled to participate in five more examinations. If the student has not passed the exam after four participations he/she is encouraged to visit the study advisor. If the student has failed six examinations/tests, no additional examination or new admission is provided.

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

Examination will be provided during a time of two years after a possible cancellation of the course. Examination can take place according to an earlier literature list during a time of one year after the date when a major renewal of the literature list has been made.

## Other directives

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

The course language is English.

## Literature and other teaching aids

*Aschengrau, Ann.; Seage, George R.*

### **Essentials of epidemiology in public health**

Sudbury, Mass. : Jones and Bartlett, c2003. - xi, 468 p.

ISBN:0-7637-2537-4 (pbk.) LIBRIS-ID:8965801

[Library search](#)

### **Global Health : An Introductory textbook**

*Lindstrand, Ann; Bergström, Staffan; Rosling, Hans; Rubenson, Birgitta; Stenson, Bo*

Studentlitteratur AB, 2006 - 326

ISBN:9144021984

*Chapter reference will be given during the course.*

[Library search](#)

*Rothman, K*

### **Epidemiology. An introduction.**

Oxford University Press, 2002