



**Karolinska
Institutet**

Course syllabus for

Methods for studying the distribution of health, 7.5 credits

Metoder för att studera sjukdomars förekomst och spridning, 7.5 hp

This course syllabus is valid from autumn 2012.

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

Autumn2012 , [Autumn2013](#) , [Autumn2015](#)

Course code	4FH064
Course name	Methods for studying the distribution of health
Credits	7.5 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	Institute of Environmental Medicine
Decided by	Programnämnd 5
Decision date	2012-03-29
Course syllabus valid from	Autumn 2012

Specific entry requirements

Bachelor's degree or professional qualification worth at least 180 credits in public health science, healthcare or other relevant social sciences subject area. English language skills equivalent to English B at Swedish upper secondary school.

Objectives

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

- define and discuss the goals of public health and distinguish between basic, clinical and public health research,
- discuss the key components of epidemiology (population, distribution, determinants, and control of disease),
- describe the main elements of descriptive epidemiology and discuss the scientific and administrative uses of it,
- describe the major sources of health and administrative data, their cons and pros with the main focus on the Swedish registers and their components,
- estimate and interpret measures of disease occurrence and describe their association to different epidemiological study designs,

- distinguish between experimental and observational studies and describe the key characteristics of these studies,
- apply knowledge of basic epidemiological concepts when critically reviewing scientific literature.

Content

The course aims to give knowledge in methods for studying the occurrence and distribution of disease in theory and in practice. The course focuses on measures of disease occurrence, comparing disease frequencies, and descriptive epidemiology (crude, specific, and adjusted rates). The course also introduces common designs for epidemiological studies (experimental, cohort-, case-control-, cross-sectional- and ecologic studies) and their interpretation.

Teaching methods

The theories and concepts presented in lectures are applied, explored, and expanded upon in group exercises, group discussions, and reviews of scientific articles.

Examination

Group tasks along with written and oral individual tasks.

The grade will be an average of these.

Compulsory participation

Quizzes and group works are compulsory. The course director assesses if and, in that case, how absence can be compensated. Before the student has participated in all compulsory parts or compensated absence in accordance with the course director's instructions, the student's results for the course/respective part will not be 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.

Transitional provisions

After each course occasion there will be at least six occasions for the examination within a 2-year period from the end of the course.

Other directives

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

The course language is English.

Literature and other teaching aids

Rothman, Kenneth J.

Epidemiology : an introduction

New York : Oxford University Press, 2002 - viii, [3], 223 s.

ISBN:0-19-513553-9 LIBRIS-ID:8277144

[Library search](#)

A dictionary of epidemiology

Last, John M.

4. ed. : Oxford ;a New York : Oxford University Press, 2001 - xx, 196 s.

ISBN:0-19-514168-7 LIBRIS-ID:4615039

[Library search](#)

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](#)