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 2021.
Please note that the course syllabus is available in the following versions:
Autumn2019 , Autumn2021

Course code	4FH082
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	Utbildningsnämnden PHS
Decision date	2018-10-09
Revised by	Education Committee GPH
Last revision	2021-03-15
Course syllabus valid from	Autumn 2021

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.

Objectives

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

- estimate and interpret measures of disease occurrence.
- describe and discuss the key components of epidemiology (measures of disease occurrence, comparison of disease occurrence, epidemiological study designs, random and systematic error).
- discuss the application of epidemiological methods in different contexts, including etiological and descriptive purposes.
- be familiar with methods for collecting health data in Sweden an internationally and be able to discuss their cons and pros.

- distinguish between experimental and observational studies and describe the key characteristics of these studies
- draw basic conclusions from descriptive epidemiological concepts when critically reviewing scientific literature.

Content

The course aims to give knowledge about basic epidemiological methods and its different applications, including:

- measures of disease occurrence (prevalence, incidence, cumulative incidence)
- methods for collecting information on and monitoring of public health (registries, questionnaires, interviews, screening).
- methods for comparing disease occurrence across different determinants and populations
- sources of bias in epidemiological studies (random and systematic errors).
- interpretation of epidemiological findings, using real-world examples
- introduction to epidemiological study design(e.g. observational/experimental, cross sectional/prospective, ecological/individual based).

Teaching methods

The theories and concepts presented in lectures are applied and expanded upon in group exercises, group discussions, and reviews of scientific articles. Individual written tasks are given on a regular basis (e.g. every week).

Examination

Group tasks along with written individual tasks and a written examination.

The grade will be based on results from the written examination (70%) together with individual and group exercises (30%).

Compulsory participation
Quizzes and group work 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.

If there are special reasons, or the need for adaptation for students with disabilities, the examiner may decide to deviate from the syllabus' regulations on examination form, number of examination opportunities, possibility of supplementation or exemption from compulsory educational elements, etc. Content and learning objectives and level of expected skills, knowledge and capabilities may not be altered, removed or reduced.

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

Scientific articles will be distributed during the course.

Gordis, Leon
Epidemiology

4. ed. : Philadelphia : Elsevier/Saunders, cop. 2009 - xv, 375 s.
ISBN:978-1-4160-4002-6 LIBRIS-ID:10877647
Library search

Rothman, Kenneth J.
Epidemiology : an introduction

2. ed. : New York, NY : Oxford University Press, cop. 2012 - viii, 268 s.
ISBN:978-0-19-975455-7 (pbk. : alk. paper) LIBRIS-ID:13454717
Library search

Norell, Staffan
Workbook of epidemiology

New York ;a Oxford : Oxford University Press, 1995 - x, 317 s.
ISBN:0-19-507490-4 (inb.) LIBRIS-ID:4611326
Library search