SAHLGRENSKA ACADEMY

FHE120, Epidemiology, biostatistics and basic pathophysiology, 15,0 higher education credits
Epidemiologi, biostatistik och grundläggande sjukdomslära, 15.0 högskolepoäng

First Cycle

1. Confirmation
The course syllabus was confirmed by Institute of Medicine on 2013-06-12 and was last revised by Institute of Medicine on 2013-11-01 to be valid from 2013-11-01.

Field of education: Medicine 100 %
Department: Department of Medicine

2. Position in the educational system
The course is taught during the first term of the Programme in Public Health Science with Health Economics. First Cycle. The course may also be given as a single subject course.

Main field of studies
Public Health Science with Health Economics

Specialization
G1N, First Cycle, has only upper-secondary level entry requirements

3. Entry requirements
Admission to the course requires admission to the Programme in Public Health Science with Health Economics at the University of Gothenburg.
The programme has the following eligibility requirements: Basic eligibility and English B, Mathematics B or English 6, Mathematics 2a/2b/2c (fieldeligibility 6 b/A6 b, exeption is made for Science A/1b/1a1 +1a2, Civics A/1b/1a1 / +1 a2).

4. Course content
Part1: Basic pathophysiology
This part of the course includes introduction of basic medicine, with focus on common diseases:
• the etiology, symptom, diagnosis and treatment of common diseases
• common diseases of men or women
• basic medical terms

**Part 2: Epidemiology and Biostatistics**

This part of the course includes basics of epidemiology and biostatistics; it will cover the following topics:
• basic concepts of epidemiology and biostatistics
• the theory and practice of epidemiology
• introduction of research methods and study types of epidemiology
• calculation of epidemiological measurements such as prevalence, incidence, odds ratio and relative risk
• theory and practical exercises of biostatistics
• critical reviewing of scientific papers

**Subcourses**

Epidemiology and biostatistics (*Epidemiology and biostatistics*), 10,5 hp grading scale: Fail (U), Pass (G)
Basic pathophysiology (*Basic pathophysiology*), 4,5 hp grading scale: Fail (U), Pass (G)

**5. Learning outcomes**

After completing the course the student should be able to:

**Knowledge and understanding**
• explain main concept of medical terms
• describe the etiology, symptom, diagnosis and treatment of common diseases
• explain basic concepts of epidemiology and biostatistics
• identify and describe common study types of epidemiology
• explain basic statistical methods that are used for analysis of epidemiological data

**Skills and abilities**
• calculate and interpret epidemiological measurements, relative risk and odds ratio
• calculate and interpret basic statistics

**Judgement and approach**
• performe critical reviews of scientific papers based on epidemiological methods, including basic medical terms

**6. Literature**

See appendix.

**7. Assessment**

**Part 1. Basic Pathophysiology**

The examination is individual and done as a problem-based exercise followed by a written assignment. To pass the course both the problem-based exercise and the assignment have to be approved.

**Part 2. Epidemiology and Biostatistics**

An approved written individual examination is required to pass the course.

**8. Grading scale**

The grading scale comprises Fail (U), Pass (G).
Rules for applying the ECTS grading system, see decisions from 2011-01-21, dnr. 5545/2009.

9. Course evaluation

10. Additional information
Language of instruction: Swedish and English.
Some of the teaching is in English. Communication with teachers may be in Swedish and English.
Litteraturlista FHV120, Epidemiologi, biostatistik och grundläggande sjukdomslära, 15 högskolepoäng

KURSLITTERATUR


Artiklar ur vetenskapliga tidskrifter tillkommer.

REKOMMENDERAD LITTERATUR


