



INSTITUTE OF MEDICINE

MGH102 Quantitative and qualitative methods, 15 credits

Kvantitativa och kvalitativa metoder, 15 högskolepoäng

Second Cycle

Confirmation

This course syllabus was confirmed by Institute of Medicine on 2016-04-08 and was last revised on 2023-06-09 to be valid from 2023-08-28, autumn semester of 2023.

Field of education: Social Sciences 10%, Medicine 80% and Arts 10%

Department: Institute of Medicine

Other participating departments

School of Global Studies

Department of Literature, History of Ideas, and Religion

Department of Economics

Department of Social Work

Position in the educational system

The course is included in the Masters of Global Health (MGH) and is given in term 1.

The course can be part of the following programme: 1) Master's Programme in Global Health (V2GLH)

Main field of studies

Global Health

Specialization

A1N, Second cycle, has only first-cycle course/s as entry requirements

Entry requirements

Entry to the course requires a Bachelor degree or professional qualification corresponding to at least 180 hrc or the equivalent. In addition the course has special eligibility in English B level or English proficiency equivalent to IELTS 6.5 no part under 5.5 or TOEFL 575 p, TWE score 4.5 is also required.

Learning outcomes

On successful completion of the course the student will be able to:

Knowledge and understanding

Present the foundations and principles, and elaborate on appropriate areas for the application of quantitative and qualitative research respectively,
Describe key concepts and the strengths and weaknesses of different quantitative methods for research on global health topics and for disease surveillance,
Explain basic concepts and principles of hypothesis testing and confidence intervals and their usefulness and limitations in analyzing and reporting data within quantitative research in global health,

Competence and skills

Apply basic concepts and appropriate statistical methods commonly used in epidemiology,
Summarize data and conduct basic analyses using software appropriate for quantitative analyses, such as STATA, and be able to interpret the results,
Discuss basic principles for quality and ethics in quantitative and qualitative research, and identify threats to validity in different study designs and global health contexts,

Judgement and approach

Critically examine and assess quantitative and qualitative studies under various quality criteria, with a focus on validity as well as research ethics,
Identify and reflect on ethical, quality, and sustainability issues specific to carrying out research on and with populations at risk.

Course content

During the course both theoretical foundations and scientific implementations of research methods will be covered in lectures, seminars and workshops. The main part of the course focuses on quantitative methods, with specific focus on epidemiology and biostatistics. Concepts such as measurement of disease occurrence and association, surveillance, epidemiological study designs, threats to validity, and descriptive and inferential statistics will be covered. The course also contains an outline of theory of science and qualitative methods, and students will be introduced to the complementary nature of the two methodological approaches.

The course will encompass training in practical competencies necessary for the interpretation, assessment and implementation of mainly quantitative research in global health. In addition, common ethical issues in research within the global health field will also be given attention.

Form of teaching

Lectures will be complemented by seminars and practical workshops (individual and group work) where students practice tasks significant for quantitative and qualitative research.

Language of instruction: English

Assessment

The learning outcomes of the course are assessed by two in-class written exams (in qualitative and quantitative methods, respectively), one in-class computer-based exam in biostatistics, and three mandatory seminars including written hand-ins.

Absence from any of the mandatory seminars should be supplemented through written assignments in accordance with the course leader's instructions.

If a student who has failed the same examined component twice wishes to change examiner before the next examination, a written application shall be sent to the department responsible for the course and shall be granted unless there are special reasons to the contrary (Chapter 6, Section 22 of Higher Education Ordinance).

If a student has received a recommendation from the University of Gothenburg regarding special pedagogical support, the examiner, provided that it is consistent with the course objectives and assuming that unreasonable resources are not required, may decide to provide the student with an adapted examination or an alternative form of assessment.

In cases where a course has been discontinued or has undergone major changes, the student shall normally be guaranteed at least three examination occasions (including the ordinary examination) during a period of at least one year from the last time the course was given.

Grades

The grading scale comprises: Pass with Distinction (VG), Pass (G) and Fail (U).

To Pass (G) the student must complete and pass all three exams and the mandatory seminars with attached hand-ins. To Pass with Distinction (VG) the student must qualify for a Pass and in addition obtain the level of Pass with Distinction on the exam in quantitative methods and on the computer-based exam in biostatistics.

Course evaluation

Course evaluation is carried out in writing and orally via a dialogue with the students.

The teacher responsible for the course compiles an analysis of course evaluations and

makes suggestions for the development of the course. Analysis and suggestions are shared with students and the program board. The results of and possible changes to the course will be shared with students who participated in the evaluation and students who are starting the course.

Additional information

This course is related to the topic of sustainable development, in accordance with regulations at the University of Gothenburg, as its theme relates to social, economic, and ecological sustainability.