UNIVERSITY OF GOTHENBURG

INSTITUTE OF BIOMEDICINE

BMA109 Master thesis, 30 credits

Examensarbete i biomedicinsk laboratorievetenskap, 30 högskolepoäng

Second Cycle

Confirmation

This course syllabus was confirmed by Committee for Study Programmes in Medical Diagnostics and Techniques on 2011-09-12 and was last revised on 2022-07-11 by Institute of Biomedicine to be valid from 2022-08-29, autumn semester of 2022.

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

Position in the educational system

The course is offered as a freestanding course.
A2E Second cycle

Main field of studies	*Specialization*
Biomedical Laboratory Science	A2E, Second cycle, contains degree project for Master of Arts/Master of Science (120 credits)

Entry requirements

To be eligible student should have a Bachelor's Degree (180 hec) in the medical, health care or natural sciences field as well as completed courses at second cycle level of at least 45 hec including courses with a major in biomedical laboratory science (15 hec), and scientific methodology (7.5 hec) or the equivalent. As well as Swedish B/3 and English A/5.

Learning outcomes

After completion of the course the student is expected to be able to:

Knowledge and understanding

- summarise the research field
- justify search strategies and selection of literature
- argue for selection of laboratory and examination methodology

Competence and skills

- justify the reseach problem
- use adequate terms and concepts within the area
- justify drafted design
- plan and with adequate methods carry out a project within given time frames
- apply the reference management system
- orally and in writing present a project in a scientific way
- draw conclusions and discuss critically about the results obtained and their interpretation

Judgement and approach

- discuss design, results and conclusions based on gender, class, culture and ethnicity as well as environment and sustainable development
- discuss the own work's relevance for individual and society
- discuss critically around research-ethical issues

Course content

Information competence: search and selection of literature, literature survey, databases, publishing process, peer-review system, reference management, different scientific publication forms

Ethics: ethical rules and guidelines, good research practice

Research process: design, project planning, research funding

Experimentally and/or method-oriented research project: preparation of a project plan, collection of data, processing and interpretation of data, written presentation according to norms for research documentation. Oral presentation and defence of work. Critical review and opposition of a thesis/project written by a fellow student.

Form of teaching

Teaching consists of individual work where the student receives supervision at a laboratory/department where project is performed.

The course includes compulsory literature search, submission of project plan, submission of a fictitious application for funding, seminar on application and research design, writing an overview of the area.

The student present his/her project with a written report designed as a scientific article.

The student present and defend his/her work at an oral seminar. The student also review another student's written report (referee).

Language of instruction: English and Swedish

Assessment

To pass the course the student is required to participate in all mandatory parts (literature search and seminars) and have passed result on the written assignments.

Failed components can be retaken according to instruction in the study guide or from the course coordinator.

A student who has failed a test twice has the right to change examiner, unless special causes speak against it. (HF chapter 6 section 22). Any request of this kind is made to the Institute and shall be in written form.
In cases where a course has been discontinued or has undergone major changes, the student will normally be guaranteed at least three opportunities to take the examination (including the ordinary examination) during a period of at least one year from the last time the course was given. This may not contradict Chapter 6, Section 21, Higher Education Ordinance.

Grades

The grading scale comprises: Pass (G) and Fail (U).

Course evaluation

Course evaluation is made in written form with help of a general course evaluation, as well as orally in dialogue with the students. The responsible teacher makes an analysis of the course evaluations and provides suggestions for development of the course. Analysis and suggestions are reconnected to the students and published on Gothenburg University's Internet teaching platform (GUL), and presented at the next start of the course.

Additional information

Course can be included in a Degree of Master (120 hec) in biomedical laboratory science.