



DEPARTMENT OF BIOMEDICINE

BMA101 Master Thesis in Biomedical Laboratory Science, 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 2010-08-30 and was last revised on 2016-12-20 by Institute of Biomedicine to be valid from 2017-01-16, spring semester of 2017.

Field of education: Medicine 100%

Department: Department of Biomedicine

Position in the educational system

The course is optional/independent

Main field of studies

Biomedical Laboratory Science

Specialization

A1E, Second cycle, contains degree project for Master of Arts/Master of Science (60 credits)

Entry requirements

Qualified to the course is a student with a Bachelor's degree (180 hec) with a major in the medical field as well as Swedish B/3 and English A/5.

Learning outcomes

After completing the course the student should be able to:

Knowledge and understanding

- justify their search strategies and selection of scientific information
- use adequate terms and concepts in the field
- justify their choices of laboratory and research methodology
- plan an experimental setting based on ethical rules and guidelines

Competence and skills

- plan and with adequate methods carry out an experimental or methodological oriented research project within a given time frame
- apply the reference management system
- orally and in writing present an independent work in a scientific manner
- discuss critically on experimental design, the results obtained and interpretation of them
- communicate new facts and issues
- critically review and assess their own and other's works

Judgement and approach

- reason critically about good ethics in the role as scientist
- identify her/his need for future knowledge

Course content

Information skills: Literature search, databases, publishing process, peer-review system, reference management;

Ethics: Ethics rules and guidelines, good research practice;

Experimentally and/or method-oriented research: Elaboration of a project plan, data collection, processing and interpretation of data, written report in accordance with standards for scientific documentation. Oral presentation and defense of the work. Critical examination and opposition of another student's thesis.

Form of teaching

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

The course include compulsory literature search, submission of a project plan and review of project plans as well as seminar on research ethics.

The student also participates in presentation of projects as well as opposition on the work of a fellow student.

Language of instruction: English and Swedish

Assessment

To pass the course the student has to participate in compulsory parts. These are literature search and seminars. Examination is by a written report and oral presentation, as well as defense and opposition.

Failed compulsory parts can be retaken after instruction from the responsible teacher.

A student has the right to change examiner after having failed twice in the same examination, if practically possible. Such a request to the Institute shall be in written form. The number of examination opportunities is limited to five. (HF chapter 6 section 22). Any request of this kind is made to the Institute and shall be in written.

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 with Distinction (VG), Pass (G) and Fail (U).

The grading scale comprises the grades Fail (U), Pass (G) Pass with Distinction (VG). For grade VG on the course, the student must have the grade VG on both the written report and the oral presentation.

Course evaluation

Course evaluation is done in written with the help of the Sahlgrenska Academy's joint course evaluation, and orally in dialogue with the students. The teacher compiles and makes an analysis of course evaluations and makes proposals for the development of the

course. Analysis and suggestions is reported back to the students, and published on the University of Gothenburg's learning platform (GUL), and presented at the next start of the course.

Additional information

The course can be included in a Degree of Master (60 hec).