



Faculty of Medicine

## **BIMK90, Biomedicine: Bachelor Thesis Project, 30 credits**

*Biomedicin: Examensarbete på kandidatnivå, 30 högskolepoäng*  
First Cycle / Grundnivå

---

### **Details of approval**

The syllabus was approved by The Master's Programmes Board on 2016-10-11 to be valid from 2017-01-01, spring semester 2017.

### **General Information**

Degree Project on the Bachelor's programme in biomedicine.

*Language of instruction:* English

*Main field of studies*

Biomedicine

*Depth of study relative to the degree requirements*

G2E, First cycle, has at least 60 credits in first-cycle course/s as entry requirements, contains degree project for BA/BSc

### **Learning outcomes**

#### **Knowledge and understanding**

On completion of the course, students shall be able to

- account for the knowledge situation and for current research related to the project with a scientifically correct terminology,
- account for and justify the methods that have been used in current project
- account for basic rules of publication ethics, publication forms and bibliometric methods.

#### **Competence and skills**

On completion of the course, students shall be able to?

- in consultation with supervisor plan and carry out a biomedical project within given time frames
- with feedback from supervisor independently write a scientific report as well as a popular summary
- account orally too and discuss the own advanced assignment
- on a scientific basis review and give constructive feedback on research reports
- participate in teamwork with different vocational representatives in the biomedical field.

### **Judgement and approach**

On completion of the course, students shall be able to

- reflect on which driving forces are for research and publication as well as which positive and negative consequences these can mean.
- reflect on relevant ethical, statistical and safety problems for the project as well as justify the choices that have been made
- evaluate importance and limitations of results in delimited projects based on current literature, issue, chosen methodology and processing method critically
- justify the academic and/or medical value of the biomedical project as well as account for the social use of this.

### **Course content**

Guided by a supervisor, students are to practically and theoretically execute a project with a clear connection to biomedical research. The project should have a clearly defined biomedical issue.

### **Course design**

A project with a clear biomedical connection is to be executed under supervision at a university, company or similar municipal or government organisation conducting advanced biomedical research. The student should independently contact activities, where the project can be carried out and a detailed project plan and time plan (according to model) should be handed in jointly of student and supervisor and be accepted before the work is started. The project plan is to be presented to fellow students at a seminar. The degree project includes laboratory activities, preparations, literature studies, peer review of the half-time learning of a fellow student, summary of results, evaluation and report writing. The course also includes components in popular writing, biostatistics, oral presentation and defence of the report as well as a student opposition on another student's report.

Choice of project, supervisor and teacher opponent are attested by the examiner of the course. The supervisor is responsible for the student's education during the degree project. The duties of the supervisor are to make sure that the project is executed in accordance with the project and time plan, i. e. in a manner suited to the purpose, that sufficient time is set aside for writing the report and that the final design of the report is clear and easy to follow. During the work, the student should be given possibility participate in the seminars of the research team or the activities. In connection with the presentation of the report, the supervisor is to submit documentation of the student's independence in accordance with a template. The

teaching staff reviewer is to have expertise in the field but must not have been involved in the project. The task of teacher opponent is to review the thesis and the oral presentation critically as well as assess these after the assessment criteria that are for the course.

## Assessment

The course is examined through three test parts: Course portfolio, biostatistics portfolio and written and oral presentation.

The course portfolio includes to:

- describe the project in writing in the form of a project plan and orally at a seminar,
- independently carry out trial analyse data and write the report as well as contribute actively in the work of the research group. This is assessed at the final account through the supervisor's written assessment of the student's independence as well as through submission of a reflection over the teamwork,
- carry out a student opposition where the student publicly discuss another student's degree project
- hand in introduction as well as material and method the parts of the account for peer review, as well peer reviewing the submission of fellow student
- write an individual take-home examination around scientific publication as well as to carry out article review in groups.

The biostatistics portfolio includes to:

- carry out written assignments.

In written and oral presentation is included to:

- present his work in the form of a scientific report according to existing author instructions, as well as in the form of a popular summary of the project in writing
- present and defend his project at a seminar where each student is examined individually orally.

Five examination opportunities are provided each year.

Other forms of examination can be used, if there are special reasons.

*Subcourses that are part of this course can be found in an appendix at the end of this document.*

## Grades

Marking scale: Fail, Pass.

## Entry requirements

Passed courses up to semester four (120 credits) as well as completed courses on semester five on the Biomedicine Programme.

## Subcourses in BIMK90, Biomedicine: Bachelor Thesis Project

Applies from V17

- 1601 Course Portfolio, 8,0 hp  
Grading scale: Fail, Pass
- 1602 Biostatistical Portfolio, 2,0 hp  
Grading scale: Fail, Pass
- 1603 Written and Oral Examination, 20,0 hp  
Grading scale: Fail, Pass