

Faculty of Medicine

# BIMK60, Biomedicine: Degree Project, 30 credits Biomedicin: Kandidatprojekt, 30 högskolepoäng First Cycle / Grundnivå

# Details of approval

The syllabus was approved by The Master's Programmes Board on 2022-10-25 to be valid from 2022-11-01, spring semester 2023.

# **General Information**

The course is a compulsory component of the Biomedicine Programme and is included in semester 6.

Language of instruction: English

Main field of studies	Depth of study relative to the degree requirements
Biomedicine	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, the students shall be able to:

• account for topical knowledge and methodology in current research related to the current project using scientifically correct terminology.

#### Competence and skills

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

- act in a professional manner including to respect the opinions of others in discussions about biomedical research projects, to come prepared to the activities of the course and to meet set deadlines
- independently write a scientific report according to set guidelines with feedback from supervisors, and for a Pass with Distinction a manuscript that corresponds in quality to a research publication

- summarise and communicate their own and others' research results directed at both the general public and experts in the subject area
- orally present in brief and discuss, and for a Pass with Distinction on a scientific basis defend, their own research project
- on a scientific basis review and comment, and for a Pass with Distinction give constructive feedback, on others' research projects
- contribute to teamwork and based on feedback reflect on their own professional development
- describe, and for a Pass with Distinction relate and justify, the validity of data collected in a research project, based on for example experimental design, control experiments and reproducibility
- interpret and draw conclusions from their own data collected in a research project, and for a Pass with Distinction compare and apply their own analysis in relation to topical knowledge.

#### Judgement and approach

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

- discuss, and for a Pass with Distinction justify and evaluate, limitations and strengths in research projects based on current literature, research question, chosen methodology and data processing method
- discuss, and for a Pass with Distinction analyse and justify, the scientific and medical value and significance of projects
- discuss ethical considerations, sustainable development and the societal benefits of biomedical projects.

#### Course content

Guided by a supervisor, students are to practically and theoretically execute a project with a clear connection to biomedical research. The project is to 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 that conducts advanced biomedical research. The student should independently contact an organisation where the project can be carried out. If there is no previously approved project plan for the Bachelor's project, a detailed project plan and schedule (according to the template) is to be submitted and approved before the work is started.

The degree project includes experimental activities, preparations, literature studies, peer review and participation in a reference group consisting of fellow students, compilation of results, interpretation and evaluation of data and writing a scientific report/manuscript and oral defence of the submitted report/manuscript. The course also includes feedback exercises, oral presentation and defence of the project and critical review of another student's defence.

Choice of project, supervisor and critical reviewer are approved by the course examiner. The student is responsible for their own professional development during the degree project. The supervisor's assignment includes ensuring that the work carried out follows the project plan and schedule i.e. that the work is appropriate, that enough time is allocated for the report writing, and being available to give feedback that helps the student and estimating the student's independence. The student is responsible for documenting feedback that is given during the course. During the work, the student is to be given the opportunity to participate in the daily teamwork of the organisation, such as seminars. The critical reviewer is to have expertise in the field but must not have been involved in the project. The critical reviewer's assignment is to critically review the Bachelor's project and submit a written peer review report as well as publicly discuss and examine the oral defence.

#### Assessment

The course contains two assessed components.

- 1. Course portfolio 10 credits (Fail/Pass/Pass with Distinction)
- 2. Written report 20 credits (Fail/Pass/Pass with Distinction)

The course portfolio includes participation in a reference group consisting of fellow students, presentations, peer review and written assignments.

The written report consists of a scientific report/manuscript.

Under special circumstances, other forms of assessment may apply.

The examiner, in consultation with Disability Support Services, may deviate from the regular form of examination in order to provide a permanently disabled student with a form of examination equivalent to that of a student without a disability.

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

## Grades

Marking scale: Fail, Pass, Pass with distinction.

The grading scale includes the grades Fail (U), Pass (G) and Pass with Distinction (VG). Seven of the course learning outcomes can be assessed at different levels of skill and judgement. Higher levels are stated in the course learning outcomes and are applied to both the written report and course portfolio. Assessment matrices that illustrate differences in levels are available for the students throughout the course. To achieve a Pass with Distinction as a final grade, all learning outcomes that can be assessed at the higher level must be achieved and deadlines for the assignments kept. To achieve a grade of Pass, all course learning outcomes must be achieved at least at the lower level.

### Entry requirements

Passed courses up to and including semester 4 and completed courses in semester 5 on the Biomedicine Programme.

### Further information

This course replaces the Bachelor Thesis Project (BIMK90).

Applies from V23

- 2301 Course portfolio, 10,0 hp Grading scale: Fail, Pass, Pass with distinction
  2302 Written report, 20,0 hp
  - Grading scale: Fail, Pass, Pass with distinction