



Faculty of Science

MOBK10, Molecular Biology: Bachelor's Degree Project, 30 credits

*Molekylärbiologi: Examensarbete - kandidatexamen, 30
högskolepoäng*
First Cycle / Grundnivå

Details of approval

The syllabus was approved by Study programmes board, Faculty of Science on 2021-06-08 to be valid from 2021-06-08, autumn semester 2021.

General Information

The course is an elective first-cycle course for a degree of Bachelor of Science in Molecular Biology.

Language of instruction: Swedish

Main field of studies

Molecular Biology

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

The overall aim of the course is that the student with some independence should carry out scientific project in a well defined subject area within the field of molecular biology.

Knowledge and understanding

On completion of the course the student shall be able to:

- Demonstrate advanced knowledge in a molecular biological subject or research area
- Account for the main features of safety regulations for laboratory work and fieldwork

- Describe basic principles of scientific writing and presentation techniques

Competence and skills

On completion of the course the student shall be able to:

- Plan an individual project and write a project plan
- Carry out an independent project individually or in a smaller group
- Carry out a scientific literature search using some of the most common databases
- Make a risk analysis of a laboratory exercise
- Write a scientific paper
- Use a presentation program e.g. PowerPoint
- Present the project orally for other molecular biology students

Judgement and approach

On completion of the course the student shall be able to:

- Evaluate and compile scientific information
- Evaluate the results of a scientific study
- Put the results of a scientific study into a community perspective
- Carry out a scientific discussion both as author and reviewer of a thesis during the oral presentations

Course content

Information and training in oral presentation techniques, scientific writing, database use, literature search, and how to give feedback. Planning of a theoretical or practical project with a supervisor, and writing of a project plan, which should be approved by the supervisor. After half the planned project time the student and the supervisor should make a half time evaluation, which allows the examiner to determine if the time plan holds and if the progression of the work is satisfactory. The project should be presented orally and in writing, both as a scientific report and as a popular summary. The scientific report should be written as a scientific paper or in another form approved by the supervisor. The oral presentations takes place during seminars where the work is discussed and commented. After the last seminar, the report may need to be revised to be approved. The student shall also be present at other presentations and act as opponent and give feedback on one presentation. The total work load should amount to approximately 90 working days.

Course design

The teaching consists of extensive project work, half-time report, lectures, group exercises and written and oral presentations of the project. Participation in project work, half-time report, group work, selected lectures, and presentations are compulsory.

Assessment

Examination takes place in the form of a written project plan, half-time report, evaluation of the performed work during the project, a scientific paper or report, a written popular summary, oral presentations of the project and critical review on another student's project presentation. For students who have not passed the regular examination, an additional occasion in close connection to this is offered.

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.

To pass the entire course, approved project plan, approved half-time report, approved scientific report, approved popular summary, approved oral presentations, feedback on another project, and participation in all compulsory parts, are required. The grade is decided by the examiner after consultation with an additional teacher and the supervisor. The final grade is decided through a weighing of the results of the different parts that are included in the examination. For the grade Pass with distinction is required that the student have shown independence and that the work during the project, the project plan, the written scientific report, the popular summary and the oral presentations are of high quality. In addition, the time plan must not be exceeded by more than 20 %.

Entry requirements

For admission to the course, knowledge corresponding to BIOA10 Cell and Microbiology 15 credits, BIOA11 Genetics and Evolution 15 credits, BIOC01 Human Physiology 15 credits / BIOC11 Human and Animal Physiology 15 credits, MOBA02 The Chemistry of the Cell 15 credits, MOBA03 Molecular Biology 15 credits, and 22.5 credits of chemistry, is required.

Further information

For more detailed information, see instructions for degree project for Bachelor of Science.

Subcourses in MOBK10, Molecular Biology: Bachelor's Degree Project

Applies from H21

- 2101 Half time examination, 15,0 hp
Grading scale: Fail, Pass
- 2102 Final examination, 15,0 hp
Grading scale: Fail, Pass, Pass with distinction