



**Karolinska
Institutet**

Course syllabus for

Degree Project in Molecular Life Science, Second Cycle, 30 credits

Examensarbete inom molekylära livsvetenskaper, avancerad nivå, 30 hp

This course syllabus is valid from spring 2024.

Please note that the course syllabus is available in the following versions:

Autumn2016 , Spring2020 , Spring2024

Course code	5MT004
Course name	Degree Project in Molecular Life Science, Second Cycle
Credits	30 credits
Form of Education	Higher Education, study regulation 2007
Main field of study	Molecular Life Science
Level	Second cycle, contains degree project for Master of Arts/Master of Science (120 credits)
Grading scale	Fail (U), pass (G) or pass with distinction (VG)
Department	Department of Biosciences and Nutrition
Decided by	Programnämnd 7
Decision date	2016-09-14
Revised by	Programme committee for study programmes in biomedicine
Last revision	2024-03-11
Course syllabus valid from	Spring 2024

Specific entry requirements

60 credit points from Master's programme in molecular techniques in life sciences.

Objectives

On completion of the course, the student should:

Regarding knowledge and understanding

- Show knowledge of the disciplinary foundation of the chosen subject area and proven experience, an advanced understanding of current research and development activities as well as advanced method knowledge.

Regarding skills and abilities

- Demonstrate the ability to with overall view, critical and systematic, search, collect and integrate knowledge as well as identify his/her need of additional knowledge
- Demonstrate the ability to identify, analyse, assess and handle complex phenomena, issues and situations also with limited information
- Demonstrate the ability to plan and with adequate methods carry out qualified assignments within given time frames as well as to evaluate this work
- Show such skills that is required to participate in research and development or to independently work in other qualified activities
- Demonstrate the ability to account orally and in writing in dialogue with different groups clearly too and discuss his/her conclusions and the knowledge and the arguments that underlie these

With respect to judgement and approach

- Demonstrate the ability to make assessments considering relevant scientific, social and ethical aspects

Content

The course starts with that a project plan is prepared by the student together with the supervisor. An individual project work is carried out based on what has been agreed in the project plan. The work is presented in a written report as well as orally at a seminar. Also included is to write a press release and to publicly discuss and oppose another degree project at the seminar.

Teaching methods

The teaching consists of supervision and seminars. Each student has during the course right to 20 hours of supervision sessions of which at least 7 hours individually. At special circumstances, the student has the right to change supervisor. Request for this should be set to programme co-ordinator.

Examination

Examination takes place through written and oral presentation as well as critical review of fellow student's written report. A project plan, a scientific report as well as a press release are included in the written presentation.

Participation in seminars is compulsory. Examiner assesses about and if so how absence can be compensated.

The grading criteria of the course are distributed at the beginning of the course. Bases of assessment:

- Understanding of the prescribed assignment
- Implementation of the assignment
- Knowledge of the background
- Interpretation and analysis of results
- Independence
- Ability to hold the established time plan for the work
- Oral presentation
- Written presentation

Examiner puts grade after having consulted supervisor and examining teachers, based on the implementation and final presentation of the work.

Late submission of the independent project will influence the right to supervision and effect the final grade according to the grading criteria of the course.

Students who have passed examination may not go through new examination for higher grades.

The course director assesses if, and in that case how, absence can be compensated. Before the student has participated in all compulsory parts or compensated absence in accordance with the course director's instructions, the student's results for respective part will not be registered.

If there are special grounds, or a need for adaptation for a student with a disability, the examiner may decide to deviate from the syllabus's regulations on the examination form, the number of examination opportunities, the possibility of supplementation or exemptions from the compulsory section/s of the course etc. Content and learning outcomes as well as the level of expected skills, knowledge and abilities may not be changed, removed or reduced.

Transitional provisions

The course has been cancelled and was offered for the last time in the spring semester of 2024. The course has been replaced with another, and examination will be provided according to the guidelines in the syllabus for 5MT014.

Other directives

The course is given in English.

The course is carried out in collaboration with Stockholm University and KTH within the scope of the joint Master's (120 credits) programme in molecular technologies in the life sciences. Equivalent course syllabi for degree project are established on the other higher education institutions.

Literature and other teaching aids