



Course syllabus for

## **Junior Research Project, 9 credits**

Junior Research Project, 9 hp

This course has been cancelled, for further information see Transitional provisions in the last version of the syllabus.

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

[Spring2012](#) , [Spring2014](#) , [Spring2016](#) , [Spring2020](#)

|                            |   |
|----------------------------|---|
| Course code                | 4BI088  |
| Course name                | Junior Research Project                                 |
| Credits                    | 9 credits   |
| Form of Education          | Higher Education, study regulation 2007                 |
| Main field of study        | Biomedicine   |
| Level                      | AV - Second cycle                                       |
| Grading scale              | Fail (U), pass (G) or pass with distinction (VG)        |
| Department                 | Department of Medical Biochemistry and Biophysics       |
| Decided by                 | Programnämnd 7  |
| Decision date              | 2011-12-21  |
| Revised by                 | Programme committee for study programmes in biomedicine |
| Last revision              | 2021-04-22  |
| Course syllabus valid from | Spring 2020   |

### **Specific entry requirements**

A Bachelor's degree or a professional degree worth at least 180 credits in biomedicine, biotechnology, cellular and molecular biology or medicine. English language skills equivalent to English B at Swedish upper secondary school.

### **Objectives**

The aim of the course is to broaden and deepen the student's methodological knowledge within the field of biomedical research in the context of a scientific project.

Upon completion of the course, the student should be able to:

Regarding knowledge and understanding

- account for a biomedical experimental method and the theory behind it,
- explain the choice of method,
- apply experimental methods to answer a scientific question.

## Regarding competence and skills

- carry out an experimental method within biomedicine in a safe, technically correct and skillful manner,
- interpret results in relation to the choice of method in the context of a scientific project,
- account for and analyse their own laboratory work by writing a scientific report according to scientific ethical rules for publication of results,
- discuss scientific methods and results within a group of peers.

## Regarding judgement and approach

- demonstrate realistic time planning, capability to work in a group and the ability to connect theoretical and practical expertise.

## Content

The course consists of an individual research project with an emphasis on methodology and literature studies according to an individual study plan that also serves as a project description. The individual study plan is established by the supervisor and student together before the course. At the end of the practical work, a research report is written that is to be presented orally and discussed.

Projects can be carried out at another university or public authority than Karolinska Institutet, or at a company.

## Teaching methods

Individual laboratory work and scientific writing under supervision. Participation in seminars, journal clubs or similar activities within respective scientific environments. Gathering of scientific literature according to the supervisor's recommendation and own assessment.

## Examination

Passing of the course requires approved research project and presentations (written and oral) and active participation in discussion of the oral presentations. The examiner sets the grade after consultation with the supervisor and the examining teacher based on the work performance, the research report and the research presentation.

Students that fail to submit compulsory assignments by the deadlines will lose the opportunity to be graded with pass with distinction on the course.

### Compulsory participation

Attendance is compulsory for the research work and the oral presentation. The course director together with the supervisor 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 will not be registered in LADOK. Absence from a compulsory activity may result in that the student cannot compensate the absence until the next time the course is given.

### Limited number of examinations or practical training sessions

Students who have not passed the course after their first presentations are entitled to rework their report and/or presentation and participate in five more presentations. If the student has not passed the course after six presentations, no additional opportunity to present or new admission is provided.

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 given for the last time in spring 2021. According to the syllabus, the final semester when examination will be offered to students who have not completed the course is spring 2023. Six occasions to take the examination will be offered during the transitional period.

## **Other directives**

The course language is English.

Course evaluation will be carried out in accordance with the guidelines established by the Board of Higher Education.

Oral evaluation in the form of course council meetings will be carried out during the course.

## **Literature and other teaching aids**

Specific material referred to during the course forms the course literature.