



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 7
Last revision	2013-10-31
Course syllabus valid from	Spring 2014

### **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.

### **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,
- acquire and critically review scientific literature relevant to an experimental method,

## Regarding skills and ability

- 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,
- show, to a certain extent, independence, critical and creative thinking,

## Regarding judgement and approach

- demonstrate realistic time planning, collegial cooperation 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

The examination consists of a written research report and an oral presentation. 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.

### 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.

### Limited number of examinations or practical training sessions

Students who have not passed the regular examination are entitled to participate in five more examinations. If the student has failed six examinations/tests, no additional examination or new admission is provided.

The number of times that the student has participated in one and the same examination is regarded as an examination session. Submission of "blank exam" [\*] is counted as examination session. An examination session to which the student registered but did not participate is not counted as an examination session.

[\*] For this course "blank exam" implies for example that the written report has not been carried out according to instruction, or failure to present and/or discuss his/her own work.

## **Transitional provisions**

After each course occasion there will be at least six occasions for the examination within a two-year period from the end of the course.

## **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**

Scientific literature of relevance for the work, chosen by the supervisor.