



**Karolinska  
Institutet**

Course syllabus for

# **Applied physiology and pharmacology - research project 1, 7.5 credits**

Tillämpad fysiologi och farmakologi - forskningsprojekt 1, 7.5 hp

This course syllabus is valid from autumn 2024.

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

Autumn2023 , Autumn2024

Course code	4FF005
Course name	Applied physiology and pharmacology - research project 1
Credits	7.5 credits
Form of Education	Higher Education, study regulation 2007
Main field of study	Translational Physiology and Pharmacology
Level	AV - Second cycle
Grading scale	Pass with distinction, Pass, Fail
Department	Department of Physiology and Pharmacology
Decided by	Education committee FyFa
Decision date	2022-01-12
Revised by	Education committee FyFa
Last revision	2024-03-05
Course syllabus valid from	Autumn 2024

## **Specific entry requirements**

At least the grade Pass in the courses Integrated physiology and pharmacology (semester 1) and Physiological and pharmacological mechanisms and experimental methods (semester 2) on the Master (120 credits) programme in Translational Physiology and Pharmacology.

## **Objectives**

The aim of the course is to offer the student the possibility to deepen his/her ability to apply the subject-specific knowledge in basic research, clinical activities and/or drug development through a shorter research or development project in collaboration with a research team at a university or a unit at a company or public authority in the Life Science sector.

After completing the course, the student should be able to:

- Show knowledge and understanding of integration of physiological and pharmacological principles and apply it within the scope of a research or development project.

- Plan and under supervision carry out a project that requires knowledge and methods in translational physiology and pharmacology.
- Present the project work in writing and orally.
- Reflect on and evaluate one's own actions and contributions to a sustainable environment.

## Content

Through shorter research and development projects in collaboration with a research team at a university or a unit at a company or public authority in the Life Science sector the student obtains the possibility to deepen his/her ability to apply the subject-specific knowledge in basic research, clinical activities and/or drug development under supervision. The project intends to highlight or solve specific issues that the collaborator or the research team provide.

## Teaching methods

Seminars in connection with the start of the course and the examination. The project and its contents define the working methods, including laboratory work, literature studies or equivalent.

## Examination

- Written assignment Graded Fail/Pass/Pass with distinction.
- Oral popular scientific summary of the project and its relevance. Graded Fail/Pass.

Written assignments should be submitted before the end of the course according to the specification in the schedule. To pass the course (the grade Pass or higher), at least Pass on all examinations in the course is required. To pass the course with distinction, the grade Pass with distinction on the written assignment is required.

### Limitation of number of examinations

The students who have not passed the course according to the schedule are allowed to revise and hand in the report and/or do the oral presentation for at the most five additional occasions. If the student has failed six times in total, no further examination or continued course participation is allowed. The number of submissions of the project report is defined by the number of times the student has handed in a revised version to an examining teacher.

### Practice

The examiner may immediately suspend a student's internship or the equivalent if the student shows serious deficiencies in knowledge, skills or attitudes that the trust vis-à-vis the collaborative partner is damaged or broken.

When the internship is interrupted in this way, the student fails this part and the project placement opportunity is exhausted. In such cases, an individual action plan should be established, where it is apparent which activities and examinations that are required for the student to be able to pass the course.

In the event of special circumstances, or if a student with a disability is in need of certain adjustments, the examiner may decide to depart from the syllabus' regulations on examination form, number of examination opportunities, possibility of completion or exemption from compulsory educational elements, etc. Content and intended learning outcomes as well as the level of expected skills, knowledge and abilities must not be altered, removed or lowered.

## Other directives

The course is offered in English. Course evaluation takes place according to the guidelines that are established by the Committee for education at basic level and second cycle.

## **Literature and other teaching aids**

The student is expected to search for literature that is relevant to the specific project.