



INSTITUTE OF NEUROSCIENCE AND PHYSIOLOGY

FYV820 Inflammation, from physiology to potential pharmacological therapies, 7.5 credits

Inflammation, från fysiologi till farmakologiska terapeutiska möjligheter, 7,5 högskolepoäng

Second Cycle

Confirmation

This course syllabus was confirmed by Institute of Neuroscience and Physiology on 2013-11-12 and was last revised on 2018-12-17 to be valid from 2018-12-17, spring semester of 2019.

Field of education: Pharmacy 100%

Department: Institute of Neuroscience and Physiology

Position in the educational system

The course is included in Pharmacy programme 300 credits at the advanced level and is an elective course.

The course can be part of the following programmes: 1) Programme in Pharmacy (F2APP) and 2) Programme in Pharmacy (F2APO)

Main field of studies

Pharmaceutical Science

Specialization

A1F, Second cycle, has second-cycle course/s as entry requirements

Entry requirements

For admission to the course, passed courses in term 1-5 and completed in semesters 6-7 is required.

Learning outcomes

After completing the course, students should be able to:

Knowledge and understanding

Describe how inflammation and components of the immune system contribute to the disease processes in different organ systems.

Describe how basic research leads to new drug development

Competence and skills

Search and find scientific literature relevant to defined topics

Summarize, and present a defined topic based on the scientific literature

Judgement and approach

Identify and concretize their own needs for further knowledge development and learning

Course content

This is a research-oriented course that consists of lectures, seminars, and demonstrations. It aims to provide in-depth knowledge on new scientific advances on the role of inflammation, including topics related to both the innate and adaptive immunity, in disease development, and the relevant therapeutic potentials and pharmaceutical strategies.

The course covers the following topics:

- The role of inflammation in disease development involving different organ systems, with a focus on sterile inflammation, autoimmune diseases, and central nervous system pathologies.
- The function and contribution of different immune cells from both the innate and adaptive immune systems in the pathobiology of diseases.
- The importance of inflammatory mediators such as cytokines and chemokines in the disease process.
- The contribution of immune receptors and molecular signaling pathways in different diseases.
- Novel therapeutic potentials based on the advances in basic research.
- The application of advanced methods and techniques in inflammation research.

Form of teaching

The course consists of lectures, seminars and demonstrations. Seminars and demonstrations are mandatory.

Language of instruction: Swedish and English

The language of instruction will be English and Swedish. The course is given in English. Teaching materials are in English.

Assessment

An overall assessment will be made based on the student's performance in the seminars, demonstration and the individual oral presentation. To pass the course, the student is required to:

- participate at the seminars and at the demonstration
- hold an individual oral presentation

Students have the right to change examiners after having failed twice on the same exam. In that case, a request to the Department must be made in writing.

Grades

The grading scale comprises: Pass (G) and Fail (U).

Course evaluation

An evaluation questionnaire will be distributed to the students during the course. A course council meeting with students and the course leader will be held during and/or after the course. The results of the evaluation will be communicated to the students and will function as a guide for the future development of the course.

Additional information