Faculty of Medicine

BIMB32, Biomedicine: The Immune System, 7.5 credits

Biomedicin: Immunsystemet, 7,5 högskolepoäng

First Cycle / Grundnivå

Details of approval

The syllabus was approved by The Master's Programmes Board on 2021-03-16 to be valid from 2021-03-24, autumn semester 2021.

General Information

The course is compulsory in the Biomedicine programme and included in semester 3.

Language of instruction: English

Main field of studies	*Depth of study relative to the degree requirements*
Biomedicine	G1F, First cycle, has less than 60 credits in first-cycle course/s as entry requirements

Learning outcomes

Knowledge and understanding

On completion of the course, the students shall be able to

- describe different immune barriers and describe how blood cells are formed, communicate and function to protect the host
- describe how cellular and soluble components in the immune system act to create an acute phase response, inflammation and fever
- give a basic explanation of how an immunological memory is created, how the specificity of the immune system is achieved and how and why tolerance development happens
- describe how hypersensitivity and susceptibility to infection varies with genetic heredity and environment
- describe the principle for basic immunological methods and give examples of areas of application

Competence and skills

On completion of the course, the students shall be able to

- carry out a laboratory experiment and summarise this as a graphic abstract, research abstract and a popular science article
- orally present the content of a research article at a level adapted for the general public
- reason about how biomedical research findings can be presented in the mass media and give examples of what influences the credibility of the findings
- appear with a professional approach, respect others' opinions in discussions about immunology and meet given deadlines

Judgement and approach

On completion of the course, the students shall be able to

- reflect on the effects of vaccination from a global and individual health perspective

Course content

The course covers basic knowledge about immunology, how different barriers interact with an aim to protect the host from infection or the development of cancer. Central and peripheral tolerance is discussed and placed in relation to susceptibility to infection and hypersensitivity reactions. Principles of immunisation are discussed and related to the vaccination debate in society and the role of the mass media in influencing public opinion.

Course design

The course mainly uses student-active learning methods, which places requirements on the students to prepare before the teaching components. The students are expected to act professionally and, just as in a future work situation, participate constructively in the working group to enable the group to make progress. A simple laboratory session is connected to the course to provide training in immunological methodology.

Assessment

The learning outcomes are assessed through:

1. Course portfolio 5 credits (Fail/Pass/Pass with Distinction)
2. Multiple-choice questions 2.5 credits (Fail/Pass)

If there are special reasons, other forms of examination may apply.

The examiner, in consultation with Disability Support Services, may deviate from the regular form of examination in order to provide a permanently disabled student with a form of examination equivalent to that of a student without a disability.

Subcourses that are part of this course can be found in an appendix at the end of this document.

Grades

Marking scale: Fail, Pass, Pass with distinction.
To achieve the grade of Pass as final grade, all components must be passed. To achieve the grade of Pass with Distinction as final grade, the grade of Pass with Distinction is required for the course portfolio.

Entry requirements

Passed examinations and course components in semester 1 and 2 of the programme for at least 45 credits and completion of the course BIMB22 The Cell and its Environment.

Further information

Partly replaces the earlier course BIMA47.

Subcourses in BIMB32, Biomedicine: The Immune System

Applies from H21

2101 Course portfolio, 5,0 hp
Grading scale: Fail, Pass, Pass with distinction
2102 Multiple-choice questions, 2,5 hp
Grading scale: Fail, Pass