Course syllabus for

Tissue Biology, 5 credits

Vävnadsbiologi, 5 hp
This course syllabus is valid from spring 2011.
Please note that the course syllabus is available in the following versions:
Spring2009 , Spring2011 , Spring2012 , Spring2014

Course code	1BI005
Course name	Tissue Biology
Credits	5 credits
Form of Education	Higher Education, study regulation 2007
Main field of study	Biomedicine
Level	G2 - First cycle 2
Grading scale	Excellent, Very good, Good, Satisfactory, Sufficient, Fail, Fail
Department	Department of Laboratory Medicine
Decided by	Programnämnden för biomedicinprogrammen
Decision date	2008-10-13
Revised by	Programnämnd 7
Last revision	2010-10-26
Course syllabus valid from	Spring 2011

Specific entry requirements

At least grade E at the courses in Introduction to biomedical science (1BI001) and General and Organic Chemistry (1BI000), and at least grade G (pass) at part 1 and 2, Basal metabolism and laborations (3+2 credits) of the course Medical biochemistry (1BI002), and part 1, Cell biology (6 credits) of the course Cell biology and genetics (1BI003).

Objectives

After completing the course, the student should: - be able to describe principally different cell types and their specialized functions - understand the structure of different tissue types, and how the cells of these tissues cooperate to give optimal functionality from molecular to tissue level - recognize, name and give detailed descriptions of different tissue types and their cells in histological samples - be able to describe principles of basic pathology - be familiar with the theory and practice of different types of tissue analysis preparations - know the underlying principles of the most common tissue analysis methods - be able to independently plan, conduct, evaluate and summarize the experimental findings in a standard written format

Content

The course starts with an introduction to the general aspects of tissue structure and key morphological terms used in histology. An emphasis in the course is the understanding of histologic appearance of various organ systems and the connection to its function. Also dealt with are basic principles of pathology, such as cell damage, cell death, tissue repair and tumour pathology. A fundamental feature of the course is the study and application of various methods of tissue analysis, such as histological preparation techniques, histochemistry and immunofluorescence. Students are also introduced to microscope techniques, including fluorescence microscopy, confocal microscopy, and electron microscopy.

Teaching methods

Lectures on tissue cell types and basic disease mechanisms. The lectures are general in scope and are designed to facilitate the self-study of the course literature. Supervised microscopy of histological samples. Methods of tissue analysis are taught through lectures, demonstrations and a laboratory-based project.

Examination

Written examination. Compulsory events: The experimental work and demonstrations of histological slides are compulsory. Laboratory-based project. The course responsible person will determine whether and how the student can make up absences from compulsory events. Before the student has participated in compulsory events or made them up, the events will not be recorded in LADOK. Limitation of number of test opportunities: A student who does not obtain a pass grade on an ordinary examination is offered a maximum of five additional opportunities to sit the examination. If a student has not passed the examination after a total of four attempts it is recommended that the student retake the whole course at the next opportunity. Following this the student is permitted to sit the examination on another two occasions. A student who fails the examination on six occasions is not permitted to sit the examination again or to retake the course. Participation in an examination is defined as on occasion on which a student attends an examination, even if the student submits a blank examination paper. If a student has registered to sit an examination, but does not attend the examination, this is not defined as participation in the examination.

Transitional provisions

After each course will be offered at least six occasions for examination within a 2-year period after the course.

Other directives

Course evaluation is carried out in accordance with the guidelines established by the Board of Education.

Literature and other teaching aids

Kerr, Jeffrey B

Functional histology

2e : Elsevier, 2010

ISBN:9780729538374

Library search