



**Karolinska
Institutet**

Course syllabus for

Tissue Biology, 5 credits

Vävnadsbiologi, 5 hp

This course syllabus is valid from spring 2014.

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	Programme committee for study programmes in biomedicine
Last revision	2020-01-27
Course syllabus valid from	Spring 2014

Specific entry requirements

At least the grade E at the courses in Introduction to biomedical science and General and organic chemistry, and at least the grade pass at the parts Basal metabolism and Biochemical laboratory methods (3+2 credits) of the course Medical biochemistry, and the part Cell biology (6 credits) of the course Cell biology and genetics within the Study Programme in Biomedicine.

Objectives

Upon completion of the course, the student should:

- be able to account for different cell types and their specialised functions,
- understand how different tissues are built up, and how the cells in these tissues cooperate,
- be able to describe and identify tissues and their cells in histological tissue sections,
- know the principles of pathology, the principles behind different preparation methods prior to tissue analysis, and the theory behind the most common tissue analysis methods,
- be able to independently plan, carry out, evaluate and compile a tissue analysis laboratory project.

Content

Initially, general aspects on the structure of tissues as well as central morphological concepts within histology are presented. The emphasis in the course lies on understanding of the histological appearance of different organ systems and the connection to their functions. As a central element during the entire course, several methods for tissue analysis, such as histological preparation techniques, histochemistry and immunofluorescence are clarified. A laboratory project is planned, carried out, evaluated and compiled by the student.

The course is divided into the following parts:

Laboratory-based project, 2.0 hp

Grading scale: GU

Integration of tissue biology and pathology, 3.0 hp

Grading scale: AF

Teaching methods

The teaching will be in the form of lectures, microscopy of histological preparations, demonstrations, and a laboratory session.

Examination

Laboratory-based project (2 credits). The examination consists of written laboratory reports. Graded Fail/Pass.

Integration of tissue biology and pathology (3 credits). The examination consists of two written examinations, where both are taken into account with equally large part each. Graded A-F.

The final grade for the whole course is based on the grade for the part Integration of tissue biology and pathology. To pass the whole course (grade E or above), the grade pass must have been obtained for the other parts on the course.

Compulsory participation:

The laboratory-based project and the demonstrations are compulsory. The course director 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 for respective part 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 a blank examination is regarded as an examination. An examination, for which the student registered but not participated in, will not be counted as an examination.

Transitional provisions

The course has been cancelled and was offered for the last time in the spring semester of 2015.

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

Course hand-outs

Recommended literature

Ross, Michael H.; Pawlina, Wojciech.

Histology : a text and atlas : with correlated cell and molecular biology

6. ed. : Philadelphia : Wolters Kluwer/Lippincott Williams & Wilkins Health, c2011

ISBN:9781451101508 (International ed.) LIBRIS-ID:12030789

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