UNIVERSITY OF GOTHENBURG

INSTITUTE OF BIOMEDICINE

BMA124 Histopathological visualization methods for light microscopy, 7.5 credits

Histopatologisk visualiseringsmetodik för ljusmikroskopi, 7,5 högskolepoäng

Second Cycle

Confirmation

This course syllabus was confirmed by Institute of Biomedicine on 2020-02-05 to be valid from 2020-08-31, autumn semester of 2020.

Field of education: Medicine 100%
Department: Institute of Biomedicine

Position in the educational system

The course is given as a freestanding course.

Main field of studies	*Specialization*
Biomedical Laboratory Science	A1N, Second cycle, has only first-cycle course/s as entry requirements

Entry requirements

Bachelor's degree in Biomedical Laboratory Science or equivalent. In addition, applicants must prove knowledge of Swedish B/3 and English A/5.

Learning outcomes

On successful completion of the course the student will be able to:

Knowledge and understanding

- describe the physical and chemical mechanisms that are the basis for an adequate morphological picture in the light microscope;
- describe how to use different fixation methods and different fixatives;

- explain the function of the different procedures involved in the histochemical and immunohistochemical methods;
- describe the appearance and structure of the various cells and tissues of the body;

Competence and skills

- identify deviations that are due to incorrect fixation, preparing and coloring.

Judgement and approach

- critically review and discuss literature and articles within histochemical and immunohistochemical methods;
- interpret and reflect on applied visualization methods with light microscopy;
- choose an adequate method for the current problem.

Course content

- studies of structure and appearance of various tissues of the body
- fixation and preparation of human tissue for histochemical and immunohistochemical visualization methods;
- construction, function and settings of the light microscope.

Form of teaching

The course consist of lectures, seminars, site visits, laborations and group work.

Language of instruction: Swedish

Assessment

The course is examined at a seminar where an individual task within visualization techniques is presented orally and in written form. The course is also examined by a written exam carried out in an examination hall.

In order to pass the course the student also need to:

- participate in the laboratory work,

- submit a written assignment every week

- act as an opponent at the seminar

If a student, who has failed the same examined element on two occasions, wishes to change examiner before the next examination session, such a request is to be submitted to the department in writing and granted unless there are special reasons to the contrary (Chapter 6, Section 22 of Higher Education Ordinance).

In cases where a course has been disontinued or has undergone major changes, the student shall normally be guaranteed at least three examination sessions (including the ordinary examination session) during a period of at least one year from the last time the course was given.

Grades

The grading scale comprises: Pass with Distinction (VG), Pass (G) and Fail (U).
To get the grade pass on the whole course the student must get the grade Pass on both the seminar and the written exam, In addition to this, the mandatory parts must be fulfilled. In order to get the grade Pass with Distinction (VG) on the whole course, the student must get the grade VG on both the seminar and the written exam and the mandatory parts must be fulfilled.

Course evaluation

Course evaluation is made by a written anonymous questionnaire. The course cordinator summarize and makes an analysis of the course evaluation and provides suggestions for development of the course. Analysis and suggestions are referred back to the students and published on the Learning management platform, and the results will be presented at the next start of the course.

Additional information

In the course a virtual digital learning management platform (Canvas) is used for digital kommunication between teachers and students and between students.
Therefore, the student needs access to a computer and internet. Between the lessons the student needs to submit tasks in the virtual digital learning management platform.