



Course Regime

Course: Physiology – Microcirculation

Study Programme: Medicine

Year of the Course: 2nd, 3rd, 4th, 5th, 6th

Semester: Summer

Course type: Elective

Number of ECTS credits: 3

Lecturer(s): prof. dr. Ksenija Cankar

Participating Organisational Units (Departments and Institutes): Institute of Physiology

Date of Issue: 15. 9. 2021

A. General part (*applies to compulsory and elective courses*)

1. Course objectives

Aim is to extend and substantiate the knowledge of general functions of microcirculation with special attention to skin microcirculation; methods for assessment of microcirculation function: laser-Doppler flowmetry, capillaroscopy; characteristics of microcirculation in different organs; the effects of different mechanisms on microvascular blood flow; the relations between macrovascular and microvascular functions; the changes in microvascular morphology and function in the different physiological and pathological conditions (hypertension, diabetes, rheumatic diseases ...).

2. Comprehensive outline of the course organisation

Lectures (5 hours), seminars (20 hours), work in small groups, problem solving.

3. Description of on-going assessment of knowledge and skills

Seminar.

4. Required conditions for the final examination (Course Exam)

Completed seminar.

5. Final assessment and examination of knowledge and skills (Course Exam)

Oral exam.

6. Other provisions

The seminar must be prepared in Word format and PowerPoint presentation. The deadline for the submission of seminars and the precise instructions for preparing the seminars will be provided by the lecturer of the course at the opening meeting.

7. Fundamental study material and Supplement reading

Medical Physiology

Walter F. Boron, Emile L. Boulpaep

Seminarists receive more recent articles from selected fields.

8. Exam topics, clinical presentations and skills

Chapters:

- general functions of microcirculation with special attention to skin microcirculation;
- methods for assessment of microcirculation function: Laser-Doppler flowmetry, capillaroscopy;
- characteristics of microcirculation in different organs;
- the effects of different mechanisms on microvascular blood flow;
- the relations between macrovascular and microvascular functions;
- the changes in microvascular morphology and function in the different physiological and pathological conditions

9. Other information

The exact start date and location will be announced to students later, further schedule and terms will be agreed at the 1st lecture. Due to the coordination of the schedule of students of different years, we will set the schedule together. All students enrolled in the elective course, for the purpose of further communication, must provide an information: surname and name, year, registration number, to an e-mail: ksenija.cankar@mf.uni-lj.si.

B. Elective Courses *(considered as Elective Course Announcement)*

1. Participating main and guest lecturers

prof. dr. Ksenija Cankar, doc. dr. Živa Melik

2. Estimated time period in the semester

Start in the first week of the summer semester. Schedule will be agreed with the applicants.

3. Maximum number of students for the elective course (if the number of students able to attend the course is limited)

The total number of students is 30.

4. Please specify if the elective course is available in English for incoming international students (Erasmus + and others). Please specify any additional conditions in the case that the elective course is available for visiting students.

No.