Komisija za študijske zadeve
UL Medicinske fakultete

Univerza *v Ljubljani*
Medicinska fakulteta

Vrazov trg 2
SI-1000 Ljubljana
E: ksz@mf.uni-lj.si
T: +386 1 543 7700

Course Regime

Course: Neurophysiology

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): Inštitut za fiziologijo

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 physiology on the field of Neurosciences. Students will extend knowledge and understanding of the nervous system functions and conquer skills of theoretical problem solving. Students will learn how to acquire relevant information and how to cooperate in small group.

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
The course has no on-going assessment of knowledge and skills.

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

5. Final assessment and examination of knowledge and skills (Course Exam)
Assessment from the seminar.

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
-Bear MF, Connors BW, Paradiso MA(eds): Neuroscience, 3. edition
-Seminarists receive more recent articles from selected fields

8. Exam topics, clinical presentations and skills
The chapters from general properties and functions of the nervous system, homeostasis of nervous functions, synaptic transmission, general properties of the sensory systems, pain, visual optics, photoreception, visual neurophysiology, visual psychophysics, sound transmission and transduction, psychophysics of hearing, vestibular system, smell and taste, general organization of motor system, spinal and brain stem control of movements, brain control of movements, motor role of cerebellum and basal ganglia, the control of eye movements, vegetative nervous system, integrative brain functions, the control of homeostatic behavior, the architecture and functions of cerebral cortex, the physiology of emotions, the control of speech, the specialization of cerebral hemispheres, the physiological basis of learning and memory.

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, asist. dr. Andrej Fabjan

2. **Estimated time period in the semester**
   April, May.

3. **Maximum number of students for the elective course (if the number of students able to attend the course is limited)**
   The maximum number of students who can enroll an electivel course for a particular study program in the academic year 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.**
   Erasmus students can enrol to the elective course-neurophysiology. Students must prepare and present a seminar in English.