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Course Regime

Course: Physiology – electrocardiography (ECG)

Study Programme: Medicine

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

Semester: Summer

Course type: Elective

Number of ECTS credits: 3

Lecturer(s): doc. dr. Živa Melik

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

The aim is to extend and substantiate the knowledge on the field of Electrocardiology. Student learns to discriminate typical patterns of ECG. The student acquires the skills of solving theoretical problems, acquiring relevant information and the skills of cooperation in a small group.

2. Comprehensive outline of the course organisation

Lectures (5), seminars (20), tutorial (5).

Students learns how to make standard ECG record and to discriminate among typical patterns in the normal people and selected diseases. They make their own high resolution ECG and analyze selected ECG record in the electronic form.

- 1. ECG recording
- Normal ECG
- 3. Cardiac electrical axis: LVH and RVH
- Vector ECG
- 5. Heart rhythm, arrhythmias
- 6. P and T wave, QRS complex
- 7. ST segment changes
- 8. Advanced computer ECG analysis, HR ECG
- 9. Variability of heart rate and ECG intervals
- 10. 3D ECG and morphology of ECG waves
- 11. High frequency QRS complex

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

Coursework, seminars.

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

Completed coursework and seminars.

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

Written exam.

6. Other provisions

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7. Fundamental study material and Supplement reading

D. Dubin.

The Rapid Interpretation of EKG's Programmed Course, 4th Edition, Cover Publishing Co., Tampa, Florida 1989.

Starc V, Schlegel TT, Arenare B, Kirn B, Vrtovec B, Delgrado R, Rahman MA.

Na standardnem EKG zasnovani presejalni testi za pogoste srčne bolezni in njihovo vrednotenje. V: Fras Z, Poredoš P, editors. Zbornik prispevkov 48. Tavčarjevi dnevi; 2006 nov 3-4; Portorož. Ljubljana: Univerza v Ljubljani, Medicinska fakulteta, 2006; 279-94.

Own digital ECG database

8. Exam topics, clinical presentations and skills9. Other information

- B. Elective Courses (considered as Elective Course Announcement)
- 1. Participating main and guest lecturers doc. dr. Živa Melik, prof. dr. Vito Starc
- **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 total number of students is 30.

Completed ECG Exercise on physiology tutorial. The student can choose the course only once during the study.

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.