

Syllabus
Pathological Physiology 2
Summer Semester 2022/2023
Week 2

General Medicine

1. Lecture

- Hypertension – primary & secondary, systemic & pulmonary, classification, mechanisms, regulation
- Ischemic heart disease - acute coronary syndrome, angina pectoris, myocardial infarction, chronic ischemic heart disease

2. Seminars

- T: Coronary heart disease – acute coronary syndrome, angina pectoris, myocardial infarction, etiopathogenesis, ECG diagnosis, biochemical markers, clinical signs, complications; chronic ischemic heart disease
Cardiomyopathies – classification, inborn & acquired, etiopathogenesis, clinical signs, complications
- S: Dysrhythmias –classification, causes, mechanisms, clinical signs, interpretation of ECG
Basics of ECG

3. Semester work deadline

4. Examination of knowledge (quiz, oral examination)
5. Presentations of semester works and selected topics according to the group schedules

Dental Medicine

1. Lecture

- Atherosclerosis – pathogenesis, complications
- Ischemic heart disease - acute & chronic, angina pectoris, myocardial infarction
- Hypertension - classification, mechanisms, regulation

2. Seminars

- T: Coronary heart disease – acute coronary syndrome, angina pectoris, myocardial infarction, etiopathogenesis, ECG diagnosis, biochemical markers, clinical signs, complications; chronic ischemic heart disease
- S: Dysrhythmias –classification, causes, mechanisms, clinical signs
Basics of ECG

3. Semester work deadline

4. Examination of knowledge (quiz, oral examination)
5. Presentations of semester works and selected topics according to the group schedules

Seminars (S) = special topics for discussion; **Tutorials & homeworks & exams (T)** = discussions, consultations, oral and quiz exams on the current topics.

Note: The range of topics and their timetable during the tutorials and seminars in each group is determined by the teacher and to a large extent, by the presentations, consultation interests, questions and readiness of the group and may vary in between groups. Neither tutorials nor seminars are lectures, but dialogue and discussion and thus require an active participation and preparation of students for the topics.

Recommended audiovisual materials

Hypertension

- Renin Angiotensin Aldosterone System - <https://www.youtube.com/watch?v=bY6IWWgFCrQ>
- Part I - Regulation of Blood Pressure (Hormones) - <https://www.youtube.com/watch?v=tANEMMGoy9k>
- Part II - Regulation of Blood Pressure (Hormones) - <https://www.youtube.com/watch?v=HzfAfsZVtYU>
- Hypertension | Clinical Presentation - <https://www.youtube.com/watch?v=X5TknCu3RV0>
- Primary hypertension - <https://www.youtube.com/watch?v=qyUHnh73Sng>

- Secondary hypertension - <https://www.youtube.com/watch?v=zTb4TklMVcY>

Coronary heart disease

- Cardiology - Coronary Blood Supply - <https://www.youtube.com/watch?v=3wpT-4bSmoU>
- Acute Coronary Syndrome - <https://www.youtube.com/watch?v=TBG9Jw3yd9I>
- Angina: Stable, Unstable, Microvascular and Prinzmetal, Animation - <https://www.youtube.com/watch?v=-l-NN2PSAU8>
- HEART ATTACK (ACS & MI) - <https://www.youtube.com/watch?v=QllquanpKic>
- Ischemia 1/7 - Introduction and pathophysiology of ACS - <https://www.youtube.com/watch?v=SQnKOCcwwl7M>
- Ischemia 2/7 - Coronary anatomy - <https://www.youtube.com/watch?v=heYZCd2LRqs>
- Ischemia 3/7 - Localization on ECG - https://www.youtube.com/watch?v=OwaYb_LPL3U
- Ischemia 4/7 - UA and NTSEMI - <https://www.youtube.com/watch?v=-NvvQ7SPFK4>
- Ischemia 5/7 -Examples of UA and NSTEMI - <https://www.youtube.com/watch?v=Fs5cDIZEv-U>
- Ischemia 6/7 - STEMI on ECG - <https://www.youtube.com/watch?v=fJEq--JMuog&t=15s>
- Ischemia 7/7 - Examples of STEMI - <https://www.youtube.com/watch?v=h8T91i7RQUY>
- Angioplasty - Medical animation - <https://www.youtube.com/watch?v=p3z9FLYijrQ>