

Syllabus
Pathological Physiology 2
Summer Semester 2022/2023
Week 4

General Medicine

1. Lecture

- Obstructive & restrictive disorders - forms, pathogenesis, ventilometric differences; typical findings
- Respiratory failure - type 1 and 2 (global and partial), causes, symptoms

2. Seminars

- T: Haematological data
Platelet disorders – thrombocytopenia, thrombocytosis, alteration of thrombocyte function – classification, etiopathogenesis, clinical signs
Coagulation disorders – classification, etiopathogenesis, clinical signs
- S: Leukemias, lymphomas, myeloproliferative diseases - classification, etiopathogenesis, clinical signs

3. Examination of knowledge (quiz, oral examination)

4. Presentations of semester works and selected topics according to the group schedules

Dental Medicine

1. Lecture

- Obstructive & restrictive disorders - forms, pathogenesis, ventilometric differences; typical findings
- Respiratory failure - type 1 and 2 (global and partial), causes, symptoms

2. Seminars

- T: Haematological data
Platelet disorders – thrombocytopenia, thrombocytosis, alteration of thrombocyte function – classification, etiopathogenesis, clinical signs
Coagulation disorders – classification, etiopathogenesis, clinical signs
- S: Leukemias, lymphomas, myeloproliferative diseases - classification, etiopathogenesis, clinical signs

3. Examination of knowledge (quiz, oral examination)

4. 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

- Respiratory System Physiology - Ventilation and Perfusion (V:Q Ratio) Physiology
https://www.youtube.com/watch?v=-mL_NQ3pKnA
- Lung Function - Lung Volumes and Capacities <https://www.youtube.com/watch?v=9VdHhD1vcDU>
- Understanding Spirometry - Normal, Obstructive vs Restrictive
<https://www.youtube.com/watch?v=YwcNbVnHNAo>
- Asthma Pathophysiology <https://www.youtube.com/watch?v=NNfx27io8-k>
- Emphysema - Pathophysiology (COPD) <https://www.youtube.com/watch?v=ChISfDBHLvg>
- Chronic Obstructive Pulmonary Disease Overview (types, pathology, treatment)
<https://www.youtube.com/watch?v=H7IYd1VWCgk>

- Acute respiratory distress syndrome (ARDS) Etiology, Clinical features, Diagnosis, and Treatment <https://www.youtube.com/watch?v=KXw8LXKcmrw>
- Respiratory Failure https://www.youtube.com/watch?v=rZmo_EFs9YY
- Pulmonary Hypertension, Animation https://www.youtube.com/watch?v=LzlG_pxikzY