

Syllabus
Pathological Physiology 1
Winter Semester 2022/2023
Week 13

General Medicine

A. Lecture

1. **Cellular pathophysiology I**

Intercellular signaling

- Intercellular signaling - apocrine, paracrine, endocrine
- Receptor types; Intracellular cascades
- Signaling through G proteins, tyrosine - kinase receptors and intracellular receptors
- Intracellular function of calcium; calcium homeostasis, signaling role of nitric oxide

B. Seminars according to schedules on department webpage (patfyz.medic.upjs.sk)

1. **T:** Pathophysiology of ontogenesis – fetus, infancy, gravidity

S: Review of pathogenesis

Semester work consultation

2. Examination of knowledge (quiz, oral examination)

3. Presentations of the selected topics according to the group schedules

4. **Credit test 2 - Pathogenesis**

- All information available at <http://patfyz.medic.upjs.sk/einfo.htm>
- Topics of credit test available at <http://patfyz.medic.upjs.sk/CREDIT%20test%20II%20GM.pdf>
- Study materials available at <http://patfyz.medic.upjs.sk/estudmat.htm>

Dental Medicine

A. Lecture

1. **Oral health II.**

Disorders of oral cavity

- Caries
- Periodontitis
- Red & white lesions

B. Seminars according to schedules on department webpage (patfyz.medic.upjs.sk)

1. **T:** Review of pathogenesis

S: Semester work consultation.

2. Examination of knowledge (quiz, oral examination)

3. Presentations of the selected topics according to the group schedules

4. **Credit test 2 - Pathogenesis**

- All information available at <http://patfyz.medic.upjs.sk/einfo.htm>
- Topics of credit test available at <http://patfyz.medic.upjs.sk/CREDIT%20test%20II%20DM.pdf>
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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 time-table 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

- Common cell signaling pathway https://www.youtube.com/watch?v=9sF_h-bAnIE
- G-Protein Receptor Activation <https://www.youtube.com/watch?v=xT0mAQ4726s>
- G-protein coupled receptors (GPCRs) https://www.youtube.com/watch?v=NL_YbPigDzg
- Receptor tyrosine kinases | (RTK)s | Cell Signaling https://www.youtube.com/watch?v=LT_ws4Xvj7M
- Intracellular Receptor Model <https://www.youtube.com/watch?v=wJk7nRcclbc>
- Tooth decay and cavities - causes, symptoms, diagnosis, treatment, pathology <https://www.youtube.com/watch?v=3zL4Hou1P-c>
- Gingivitis and periodontitis - causes, symptoms, diagnosis, treatment, pathology <https://www.youtube.com/watch?v=B35jRf4EKPA>