

**Syllabus**  
**Pathological Physiology 2**  
**Summer Semester 2021/2022**  
**Week 1**

**General Medicine**

**1. Online lecture via Microsoft Teams**

- Dysrhythmias – etiopathogenesis, genetics, classification, electrophysiology,
- Cardiomyopathy - types, etiopathogenesis, classification, inborn and acquired forms
- Heart failure- definition, classification and stages, compensation

**2. Presence seminars**

- Introduction to CVS pathophysiology
- Atherosclerosis
- Coronary heart disease
- Ischemic vascular disease
- Semester work consultations

**Dental Medicine**

**1. Online lecture via Microsoft Teams**

- Dysrhythmias – etiopathogenesis, genetics, classification
- Cardiomyopathy - types, etiopathogenesis, classification, inborn and acquired forms
- Heart failure - definition, classification and stages, compensation

**2. Presence seminars**

- Valvular & congenital heart disorders
- Hypotension, hypertension
- Semester work consultations

**Recommended audiovisual materials**

*Dysrhythmias*

- Electrocardiography (ECG/EKG) – basics <https://www.youtube.com/watch?v=xIZQRjkwV9Q>
- Electrical Conduction System of the Heart – <https://www.youtube.com/watch?v=GM-q6YlzYI>
- Cardiac Action Potential, Animation - <https://www.youtube.com/watch?v=v7Q9BrNflpQ>
- Myocardial Action Potential: animation video – <https://www.youtube.com/watch?v=L2Gf9cj7JBw>
- Supraventricular arrhythmias: Pathology review - [https://www.osmosis.org/learn/Supraventricular\\_arrhythmias: Pathology review](https://www.osmosis.org/learn/Supraventricular_arrhythmias:_Pathology_review)
- Ventricular arrhythmias: Pathology review - [https://www.osmosis.org/learn/Ventricular\\_arrhythmias: Pathology review](https://www.osmosis.org/learn/Ventricular_arrhythmias:_Pathology_review)

*Heart failure*

- Congestive Heart Failure - [https://www.youtube.com/watch?v=vpYI\\_lmLD7g](https://www.youtube.com/watch?v=vpYI_lmLD7g)

*Cardiomyopathy*

- Cardiomyopathy Overview - types (dilated, hypertrophic, restrictive), pathophysiology and treatment - <https://www.youtube.com/watch?v=QC7gwTyH6uM>
- Hypertrophic cardiomyopathy - signs and symptoms, causes, pathophysiology, treatment - <https://www.youtube.com/watch?v=Lqn71jvMhQM>
- Dilated Cardiomyopathy - causes, symptoms, pathophysiology and treatment - <https://www.youtube.com/watch?v=1bRAHYe9GcU>
- Takotsubo Cardiomyopathy (Broken heart syndrome) - pathophysiology, diagnosis and treatment - <https://www.youtube.com/watch?v=d15kbYySnoY>