**LUCTURE SYLLABUS**

**(General medicine, dental medicine)**

**Introduction to pathophysiology**

**Disease, etiology, pathogenesis**

**Pathophysiology, pathological physiology**

(experimental physiology, clinical physiology)

= a science studying etiology and pathogenesis of diseases

**Etiology** = cause of diseases

**Pathogenesis** = mechanisms of the origin and development of pathological changes in the organism

General pathophysiology

Special pathophysiology

Methodology of pathophysiology

 - experiment (animals, cell or tissue cultures, humans)

 - clinical studies, observation of diseased people

 - mathematic models

**History of pathophysiology**

**Health – disease**

Definition of health

WHO: The health is the state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.

Definition of disease

 WHO: The disease is a particular abnormal, pathological state affecting a whole organism or its part.

What is normal? – statistical (5th – 95th percentile) or functional point (functioning/non-functioning) of view

Semiology = the science of signs

Objective signs

Subjective signs, symptoms

Syndrome = complex of signs occurring simultaneously

Nosologic unit

Syndrome X disease (nosologic unit)

Parkinson’s syndrome X Parkinson’s disease

Cushing’s syndrome X Cushing’s disease

Syndrome of the cerebellar ataxia X Friedreich’s ataxia

Sanogenesis = processes and factors leading to healing

Thanatogenesis = processes and factors leading to the death

**Course of the disease**

Peracute – seconds, minutes, hours

Acute – days, few weeks

Subacute – 3-4 weeks

Chronic- months, years

Recidive = new occurrence of the disease that has been cured

Exacerbation = new eruption of the disease

Remission = disappearance of disease manifestations, but the disease persists

Relapse = new occurrence of symptoms of a disease, that has been in remission

**Stages of the disease**

- Latent phase – the disease is present but without manifestations, incubation period in infections

- Prodromal phase – first manifestations, unspecific

- Manifest stadium – unspecific as well as specific manifestations of the disease

- Convalescence – a period between disappearance of the main symptoms of the disease and complete healing

- Termination, result of the disease -healing, partial healing, permanent consequences, chronic course, death

**Etiology of diseases**

**Etiological factors** – causal relation to the disease

* Intrinsic - heredity, epigenetics, age, sex
* Extrinsic - physical, chemical, biological, social

**Risk factors** – causal relation with the disease is not necessary

* Adjustable – diet, life style, infection exposure, chemical substance exposure, smoking
* Unadjustable - heredity, age, sex
* Partially adjustable - hypertension, diabetes mellitus