**LECTURE SYLLABUS**

**(Dental medicine)**

**Pathophysiology of blood**

**Changes of blood volume and composition**

Causes, pathogeny, manifestation and consequences (hypovolemia, hypervolemia)

**Pathophysiology of red blood cells (RBC)**

Anemias

* Definition of anemia, laboratory indicators
* Anemic syndrome
* Classification of anemias
* Normocytic, microcytic, macrocytic; normochromic, hypochromic
* Anemias caused by the insufficient RBC production
* Anemias caused by the increased loss of RBC, anemia caused by the acute and chronic bleeding, hemolytic anemias corpuscular and extracorpuscular
* Intoxications with change of hemoglobin properties
* Compensation of anemic syndrome

Polycythemia

Blood groups, transfusion, incompatibility

**Pathophysiology of leukocytes**

* Classification and function of leukocytes
* Disturbances of leukocyte function, inborn and acquired immunodeficient states related to leukocytes
* Changes of leukocytes number (total and individual types) – causes, consequences
* Leukaemias, lymfomas – classification, etiology, pathogeny, manifestation, consequences

**Haemorhagic diathesis**

Definition, classification; inborn and acquired

Inborn and acquired haemorhagic diathesis:

* Bleeding related to platelets (thrombocytopenia, thrombocytopathies)
* Coagulopathies (including pharmacological influence of haemostasis)
* Vasculopathies - causes, pathogeny, manifestations, different types and characteristic

High-risk patient for dentistry

**Thrombophilic states**