Criteria necessary for accreditation of the subject "General Pathology"

1) Mandatory classes:
   - Intensive course general pathology, 5th semester, 1st-9th sw, Mon.-Thurs. 11am- 1pm

2) Concordant class
   - Lecture general pathology, 5th semester, 1st-9th sw, Mon.-Thurs. 10-11 am

3) Record of achievement:
   - Exam during 5th semester

4) Learning objective: general pathology
   Learning catalog ``general pathology'':

   - Introduction, pathology of cell damages
     What is general pathology: examination material and methods, diagnosis, classification
     General Pathology
     Cell damage and cell death: reversible damage (hydrops, fatty degeneration); irreversible cell damage (necrosis, apoptosis), pigments, calcification, deposition of metabolism products

   - Inflammation and immunopathology
     Inflammation
     Definition of inflammation, history, inflammatory cells, inflammatory course (peracute, acute, subactue and chronic), example acute appendicitis
     Inflammatory vascular response, leukocyte –extravasation, chemotaxis, defense mechanisms (phagocytosis, radical formation, enzymatic digestion)
     Inflammatory mediators (Histamines, Kinins, complement factors, prostaglandins, leukotrienes, NO, PAF, interleukins, chemokines)
     Classification of inflammations according to the exudate composition: serous, serous-mucous, fibrinous (pericarditis), hemorrhagic (hemorrhagic fever), purulent, chronic-atrophic (lung emphysema), chronic-granulating (chronic Cholecystis), chronic-granulomatous
     Classification of inflammations according to their spreading: purulent-exudative (ulceration/erosion), abscess, phlegmon, empyema, other (gangrenous, necrotizing inflammation), matrix-remodeling, angioneogenesis, regeneration, tissue repair (wound healing), defect healing, and scars
     Bacteremia, sepsis and septicopyemia, disseminated intravascular coagulation, endocarditis
     General inflammatory reactions; consequences of inflammation
     Immunopathology

Structure and function of lymphatic tissue, immune system cells, reactive lymphadenitis
Hyperimmune responses type I-IV; glomerulonephritis
Autoimmunity, immune tolerance, congenital immune defects, acquired immune defects
Allergic sinusitis and asthma, Autoimmune Thyroiditis, type A-gastritis, Systemic Lupus Erythematosus, Systemic Sclerosis, Sjörgen`s Syndrome, Myositis
Amyloidosis
Chronic-granulomatous inflammation (i.e. Tbc, sarcoidosis, etc.)
General pathology of organ transplantations
General principals of infectious pathology

- Tumor pathology
  Technical terms: regulated (atrophy, hyperplasia, hypertrophy) and autonomous (benign neoplasia or dysplasia, malignant neoplasia) growth, precancerous; metaplasia
  Hamartom
  Regulation of cell growth and cell cycles; important growth factors in tumor pathology, oncogenes, tumor suppressor genes, malfunctions in signaling pathways, gene regulation or gene expression
  Tumor stroma, Angiogenesis, invasion, metastization
  Tumor immunology
  Etiology, pathogenesis and epidemiology of neoplasias: endogenic (age, gender, inheritance, genes) and exogenic (nutrition, environmental influences, carcinogens, UV- and radioactive radiation) factors of the etiology and pathogenesis
  Etiology, pathogenesis, macroscopy, microscopy (typization), differential ''grading'', ''staging'' (TNM-system), metastazation, correlation to clinic, epidemiology and prognosis for following tumors:
  Lung cancer
  Breast cancer
  Gastric cancer
  Colon cancer
  Prostate cancer
  CNS tumors (Meningioma, medulloblastoma, astrocytoma II, glioblastoma)
  Malignant lymphomas (FL, Marginal Zone- Lymphoma, DLBCL)
  Leukemias (CML, CLL, acute leukemias)

- Examples for important organic diseases
  Cardiovascular pathologies I: Arteriosclerosis, arteriolosclerosis, aneurysms: arteriosclerotic, infectious (Mesaortitis luica), thoracic aneurysms, traumatic, A. dissecans
  Cardiovascular II: Varicose veins and phlebosclerosis; phlebothrombosis and thrombophlebitis

Cardiovascular pathologies III: High blood pressure, left-sided heart failure, and right-sided heart failure
Cardiovascular pathologies IV: Heart attack, shock
Cardiovascular pathologies V: Edema, stasis, thrombosis, emboli, bleeding, hemorrhagic infarct
Intestinal tract: Hepatitis, liver reactions to medication, cirrhosis of the liver, liver tumors, hemochromatosis, gastritis, gastric ulcers, duodeno-gastric reflux, pancreatitis, cholecystitis, chronic-inflammatory intestine diseases, diverticulitis
Neuropathologies: Alzheimer´s disease, Parkinson´s disease, meningitis, brain ischemia
ENT: nasal polyps
Endocrine (Struma nodosa, thyroid adenoma, adrenal cortex hyperplasia and insufficiency, pituitary adenomas), metabolism (diabetes)
Paidopathology: small-round-blue cell tumors, neuroblastoma
Hematopathology: anemia-leukemia
Respiratory system: chronic bronchitis and bronchiolitis, lung emphysema, pneumonia, lung tuberculosis, pneumoconiosis
Gynecopathology: glandular-cystic hyperplasia of the endometrium, uterus myomatosus, ovarian cysts, tumors of the breast
Urogenital tract I: Pyelonephritis, prostate hyperplasia
Urogenital tract II: germ cell tumors
Pathology of the skeletal system: Arthrosis deformans, activated arthritis, rheumatoid arthritis, gout, pseudogout