COURSE SYLLABUS

Semmelweis University Faculty of Dentistry, Dentistry

Name of the course: Pathology

Credit value: 4

Lessons *(in hours in the whole semester)*: 70 **from this, lectures:** 42 **practicals:** 28 **seminars:-**

Type of the course: **compulsory** **obligatory elective** **elective**

Semester in which it is announced according to the curriculum: 5th semester

Frequency of announcement *(per semester or year)*: per year

The responsible educational and research organizational unit for teaching the subject:

Department of Pathology and Experimental Cancer Research

Academic year: 2023/2024

Subject (Neptun) code: FOKOPTK245_1A

Lecturer of the course: Dr. Botond TIMÁR
Academic position: associate professor
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The goals and place of the course in regards to the education of dental students:
Providing solid pathological basis of diseases that may serve fundaments of a good clinical practice. During the semester the students will be familiar with the methodology of pathology, and they will recognize the place of pathology in the medicine, in the diagnostic processes. To achieve these goals, organized lectures, autopsy practices, histopathological practices and specimen demonstration are held governed by well-trained tutors.

Location of the course *(address of lecture hall, seminar room etc.)*:
Department of Pathology and Experimental Cancer Research
(Autopsy Room, Lecture Hall, Digital Histopathological Room)

Competences acquired by completion of the course:
The students will be able to recognize the macroscopical and microscopical characteristics of the most important diseases, they can learn the casual links between the various abnormal lesions, they will be familiar with the major pathological methods, they will learn what kind of diagnostic help could the pathology provide to solve the clinical problems.

Pre-study requirements and prerequisites of course registration and completion, in case of a multi-semester subject, the standpoint of the educational-research unit on the concurrent subject registration and on the requirements of permission thereof :
Genetics and Genomics, Molecular Cell Biology II, Medical and Dental Physiology II.

Number of students required for announcement of course *(min., max.)*, method of selection:
Max. 60

Method of course registration:
Through the NEPTUN system

Detailed course/lecture description[1]: *(to facilitate credit recognition in other institutions)*
Lectures:

Atrophy
Hypertrophy. Hyperplasia. Metaplasia. Obesity.
Irreversible tissue damages. Apoptosis. Necrosis I
Irreversible tissue damages. Necrosis II.
Pathology of the inflammation. Forms of acute inflammations and characteristic diseases. Purulent inflammations
Streptococcus-induced purulent inflammations. Post-streptococcal ("secondary") diseases.
Chronic and granulomatous inflammations. Tuberculosis
Diseases of genetic background and characteristic examples
Malformations. Perinatal pathology
Hypersensitivity reactions and featured diseases
Autoimmune diseases
Regeneration, wound healing and disturbances. Calcification. Stone formation
Thrombosis and embolism
Active and passive hyperemias
Hemorrhages and anemias
Edema formation and forms
Arteriosclerosis
Pathology of hypertension. Cardiomyopathies
Cor pulmonale
Classification and morphology of neoplasms
Etiology and genetic background of neoplasms
Growth and metastasis formation of malignant neoplasms
Detailed pathology of neoplasms I.
Detailed pathology of neoplasms II.
Detailed pathology of neoplasms III.
Smoking-related pathologicak disorders
Pathology of alcoholism

Lecturers: Dr. Attila Zalatnai, Dr. Péter Nagy, Dr. Ágota Szepesi, Dr. Judit Pápay, Dr. Balázs Csernus

Histopathological Practices:

Practice I. – Adaptation, necrosis
Liver, fatty degeneration
Benign prostatic hyperplasia
Acute myocardial infarction
Lung, hemorrhagic infarction
Cerebral emollition
Stomach, chronic ulcer

Practice II. – Inflammation, circulatory pathology
Bronchopneumonia
Acut bacterial endocarditis
Chronic gastritis
Helicobacter pylori
Pulmonary tuberculosis
Mycobacterium (Ziehl-Neelsen stain)
Pulmonary edema
Atherosclerosis
Arterial thrombus

Practice III. – Neoplasms I.
Breast, fibroadenoma
Colonic polyp (adenoma)

Nevus pigmentosus
Tumor cells in pleural effusion
Cervix, in situ carcinoma
Squamous cell carcinoma of lung
Basal cell carcinoma
Colonic adenocarcinoma

Practice IV. – Neoplasms II.
Small cell anaplastic carcinoma
Breast, invasive ductal carcinoma
Lymph node metastasis
Renal cell cancer
Prostatic carcinoma
Hodgkin lymphoma

Specimen practices:
1.
liver, fatty degeneration
prostatic hyperplasia
splenic infarction
pancreas, liponecrosis
caseation – pulmonary tuberculosis
femoral artery thrombosis
cerebral apoplexia
myocardial infarction and complications
keloid

2.
fibrinous-purulent pericarditis
acute bacterial endocarditis
lobar pneumonia
pulmonary abscess
nephrolithiasis
shock kidney
bullous emphysema

3.
urinary bladder papilloma
colonic polypus
giant nevus
macroglossia + hypophysis adenoma
adrenocortical adenoma
renal cancer
urinary bladder carcinoma
endometrial carcinoma

4.
bronchial cancer of central type
Pancoast tumor
cerebral metastasis
carcinoma of skin
breast cancer
ovarian cystadenocarcinoma

melanoma malignum
Courses *(compulsory and obligatory elective)* which in part or entirely overlap the topics of above course: Anatomy, Immunology, Physiology, General and Oral Pathophysiology
Special academic work required for completion of the course[2]: Not required
Attendance on practices and lectures, replacement in case of missed sessions: According to the current Study and Examinations Regulations.
Method of checking acquired knowledge during the study period[3]: No compulsory midterms are required, but the tutors may decide the necessities, the frequencies and the mode of achievement control.
Requirements of an accepted semester *(signature of the lecturer)*: Attendance of the required practices (according to the Study and Examinations Regulations). Lectures are suggested.
Type of the exam: Semifinal, counted in the average
Requirements of the exam[3]: The exam has a practical and a theoretical part. The practical part is composed of a digitalized histological slide, a specimen and the autopsy picture demonstration. Each part is evaluated separately. During the theoretical part two topics are provided before a committee headed by the lecturer. Each topic is evaluated separately and the final mark is determined based ont he practical and the theoretical marks.
Grading of courses[4]. The possibility and requirements of an offered grade: The autopsy picture evaluation, histopathological and specimen practice marks, and the theoretical questions are evaluated in complexity. No offered grade is available.
Exam registration: Through the NEPTUN system
Rules of repeating exams: According to the current Study and Examinations Regulations.
List of textbooks, lecture notes and recommended textbooks, online material: Essential pathology for dental students (5th Ed.) – 2016. The uploaded materials in the moodle system
Signature of course lecturer: Dr. Botond Timár
Signature of head of department: Dr. András Matolcsy
Date of submission: 2023.06.30.
Opinion of OKB:
Notes from the Dean's Office:
Signature of Dean:

[1] Detailed and numbered for each week of theoretical and practical lessons one by one. In an annex, cannot be attached appendix!
[2] Eg. homework, report, midterm exam etc. Topics, dates, method of retake and replacement
[3] List of topics in case of theoretical exam, thematic and method in case of practical exam
[4] Method of inclusion of theoretical and practical exams. Method of inclusion of midterm assessments.