IMMUNOLOGY AND MEDICAL GENETICS 2023/24.

Medical studies in English, 2nd year course

Time: 08.01.2024. – 29.01.2024.

LITERATURE:

Obligatory:

Basic Immunology, Functions and Disorders of the Immune System – Abbas A.K, Lichtman A.H., Pillai S. 7th edition, Elsevier, 2024.

Recommended (additional) literature:

Cellular and Molecular Immunology - Abbas A.K, Lichtman A.H., Pillai S. 10th edition, Elsevier, 2021.

EXAM DATES:

1 st exam date	2 nd exam date	3 rd exam date	4 th exam date
January 29th	July 25 th and 26 th	September 6 th	September 20 th

Note: First exam date consists of written exams taken on January 26th and oral exam scheduled for February January 29th

EXAM: The exam consists of written and oral parts. Students should bring their identification documents (index or personal identification card) to the exam. The test consists of 60 questions. To pass the written exam students must reach a minimum of 60%, and that is the prerequisite for taking the oral exam. If the exam is taken during the first examination period (in January), points gathered during seminars will be added to the final score on the passed test, if the test scored at least 60% of correct answers. Passing a written test is valid only for the current academic year.

Test grade participates in the subject final grade with 60%, while oral exam grade makes up 40% of the final grade.

To take the exam, students must attend at least 80% of all teaching classes.

COURSE PREPARATION:

Students should prepare materials for the seminars in advance.

Students' activity during the class is rewarded by pluses/minuses, which will be assessed by the professor. Two pluses equal one point, which will be added to the written exam results only on the first examination date. A maximum of 3 points can be achieved during the course. If students are not prepared for the seminar, they can be penalized with minuses. Two minuses are equal to one negative point that will be subtracted from the exam results on the first exam term.

TEACHERS AND STAFF

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IMMUNOLOGY AND MEDICAL GENETICS

15 lectures, 27 seminars, 13 practicals

Groups: 1 lecture, 2 seminar, 6 practical

CURRICULUM:

Lectures (1 group):

- L1 (3 hours) Basic Immunology (Ch 1)
- L2 (2 hours) Innate Immunity (Ch 2)
- L3 (2 hours) Cytokines
- L4 (2 hours) Vaccination.
- L5 (2 hours) Immunotherapy. Chronic inflammation and cancer.
- L6 (2 hours) Research methods in immunology.
- L7 (2 hours) Microbiome. Mucosal immunity.

Seminars (2 groups):

- S1 (3 hours) Antigen presentation. MHC. (Ch 3)
- S2 (3 hours) Antigen recognition. Adaptive immunity. (Ch 4)
- S3 (3 hours) Cell-mediated immune responses. (Ch 5)
- S4 (2 hours) Effector mechanisms in cell-mediated immunity (Ch 6)
- S5 (3 hours) Humoral immune responses. Antibodies. (Ch 7, Cl.c 1)
- S6 (3 hours) Effector mechanisms in humoral immunity responses. Complement. (Ch 8)
- S7 (2 hours) Immunological tolerance. Autoimmunity. (Ch 9, Cl.c 4)
- S8 (3 hours) Tumor immunity. Transplantation. (Ch 10, Cl.c 2)
- S9 (2 hours) Hypersensitivity. (Ch 11, Cl.c 3).
- S10 (3 hours) Congenital and acquired immunodeficiency. (Ch 12, Cl.c 5). Discussion and problem-solving.

Practicals (6 groups)

- P1 (3 hours) Leukocytes
- P2 (3 hours) Differential blood count. Blood groups.
- P3 (3 hours) Cell culture. Western blot. IHC.
- P4 (2 hours) ELISA.
- P5 (2 hours) Flow cytometry.