Subject: Immunology (AOK-OAK061-1)

Academic year / semester: 2022/2023. II.

Type of course: lecture

Weekly nr. of hours: 2

Credits: 2

Performance assessment: colloquium

Responsible Institute: SZTE SZAOK-TTIK, Department of Immunology

Subject responsible: Dr. Krisztina Buzás Dr. Körmöndiné

Course prerequisites: AOK-OAK024, AOK-OAK025, AOK-OAK026, AOK-OAK104, AOK-OAK105, AOK-OAK106, AOK-OAK107, AOK-OAK108, AOK-OAK113, AOK-OAK114
Exam prerequisites: AOK-OAK027

Objective of the course:
As part of the immunology lecture, the basic immunological definitions and processes are discussed, as well as the associated therapies and the theoretical background of diseases of immunological origin.

Date **Fridays 8:00-10:00**	**Title**	**Professor**
1. 2023.02.10.	The structure and working principle of the immune system. Central and peripheral lymphoid organs.	Buzás Krisztina
2. 2023.02.17.	Characteristics of innate immunity. The relationship between innate and adaptive immunity.	Roberta Fajka-Boja
3. 2023.02.24.	Complement system. Cell types and mediators involved in inflammation and acute phase response.	Roberta Fajka-Boja
4. 2023.03.03.	The structure of MHC molecules, polymorphism. Antigen presentation. Development of T and B cells.	Ágnes Czibula

5. **2023.03.10.**	Antigen recognition function of T lymphocytes. The T cell mediated immune response. T cell types, their effector functions.	Ágnes Czibula
6. **2023.03.17.**	B lymphocytes. B cell activation, antigen-dependent differentiation of B cells. The structure of antibodies, antibody-mediated effector functions.	Prof. Attila Bácsi
7. **2023.03.24.**	1. TEST FOR RECOMMENDED GRADE (1. MTO)	
8. **2023.03.31.**	Immune responses against extracellular pathogens. Immune responses against intracellular pathogens. Immunescape. Immunological memory. Vaccination.	Fajka-Boja Roberta
9. **2023.04.07.**	Spring break	
10. **2023.04.14.**	Autoimmunity. Peripheral and central immune tolerance.	Prof. László Kovács
11. **2023.04.21.**	Types and characteristics of hypersensitivity reactions. Allergic reactions.	Judit Danis
12. **2023.04.28.**	Transplantation, pregnancy immunology.	Zoltán Veréb
2023.05.03. **Wednesday** **18:00**	2. TEST FOR RECOMMENDED GRADE (2. MTO)	
13. **2023.05.05.**	Tumor immunology. Immunotherapies and their role in tumor therapy.	Krisztina Buzás
14. **2023.05.12.**	Basic immunology methods. Monoclonal antibodies, Immunodiagnostics.	Gabriella Terhes

Examination of the learning outcomes:

Attendance at lectures is mandatory.

Two tests are written during the semester. In the case of grades 5 (very good) and 4 (good), the grade of the colloquium is offered at the end of the semester. Grade 4 and grade 5 means 4 (good) final grade. Grade 5 and grade 5 means 5 (very good) final grade.

Requirement of the admission to the exam: no more than 20% certified absence in the classroom teaching. (3 absences allowed)
The first and potentially repeated second exams will be written, where the condition of sufficient completion is the acquisition of 60% of the maximum points that can be obtained.

The grades are determined as follows:

0-59% unsatisfactory (1)

60-69% sufficient (2)

70-79% moderate (3)

80-89% good (4)

90-100% very good (5)

The second repeated exam and any further exams are oral. The potential improvement of the examination will be oral (in case somebody wants a better grade than the offered, for example 5 instead of 4).

The unsatisfactory semester mark can be corrected during the examination period in accordance with the examination regulations.

The basics of the exam:
The teaching material dealt with in the lectures.

Recommended specialist literature:
Janeway: Immunbiology (Taylor&Francis, 2007)

Abul Abbas Andrew Lichtman Shiv Pillai: Basic Immunology (Elsevier, 2019)

Abul Abbas Andrew Lichtman Shiv Pillai: Cellular and molecular immunology (Elsevier, 2017)