

Subject: Immunology (AOK-OAK061)

Academic year / semester: 2025/2026. 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: Prof. 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. 2026.02.13. | The structure and working principle of the immune system. Central and peripheral lymphoid organs. | Prof. Krisztina Buzás |
| 2. 2026.02.20. | Characteristics of innate immunity. The relationship between innate and adaptive immunity. | Roberta Fajka-Boja |
| 3. 2026.02.27. | The structure of MHC molecules, polymorphism. Antigen presentation. Development of T and B cells. | Ágnes Czibula |
| 4. 2026.03.06. | B lymphocytes. B cell activation, antigen-dependent differentiation of B cells. The structure of antibodies, antibody-mediated effector functions. | Prof. Attila Bácsi |

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| 5. 2026.03.13. | Antigen recognition of T lymphocytes. The T cell mediated immune response. T cell types, their effector functions. | Ágnes Czibula |
| 6. 2026.03.20. | Complement system. Cell types and mediators involved in inflammation and acute phase response. | Roberta Fajka-Boja |
| 7. 2026.03.27. | 1. TEST FOR RECOMMENDED GRADE MANDATORY (1. MTO, lectures:1-6) | |
| 2026.04.03. | Spring break | |
| 8. 2026.04.10. | Autoimmunity. Peripheral and central immune tolerance. | Prof. László Kovács |
| 9. 2026.04.17. | Immune responses against extracellular pathogens. Immune responses against intracellular pathogens. Immunescape. Immunological memory. Vaccination. | Gabriella Dobra |
| 10. 2026.04.24. | Types and characteristics of hypersensitivity reactions. Allergic reactions. | Judit Danis |
| 11. 2026.05.01. | Public day off Transplantation, pregnancy immunology. | Gyukity-Sebestyén Edina |
| 12. 2026.05.08 | Tumor immunology. Immunotherapies and their role in tumor therapy. | Prof. Krisztina Buzás |
| 2026.05.08. | 2. TEST FOR RECOMMENDED GRADE NOT mandatory; | More information will be provided on Coospace |
| 13. 2026.05.15. | Basic immunology methods. Monoclonal antibodies, Immunodiagnostics. | Gabriella Terhes |

Examination of the learning outcomes:

Attendance at lectures is mandatory.

Requirement of the admission to the exam: no more than 3 absences allowed in the classroom teaching.

In case of absence, the absence can only be justified in the manner specified in the Study Rules of the TVSZ and SZAOK.

In case of more than 3 absences, the student is not allowed to take the exam!

MTOs:

Two MTOs will be written during the semester.

1. MTO: 2026.03.27. during the lecture (mandatory)

2. MTO: 2026.05.08. 17:00 NOT mandatory. More information will be provided on Coospace

In case that the average result of the two MTOs reaches 80% the grade of the colloquium is offered at the end of the semester.

If 80% is reached, it means the offered grade 4 (good), if the averaged result of the two MTOs reaches 90%, the offered grade is 5 (excellent).

If you don't reach 80% in the MTO, there will be NO negative consequences.

Retake of the MTOs is not possible.

Exam:

The first and second exam will be written. You need to reach 60% to pass the exam.

The grades are determined as follows:

0-59% failed (1)

60-69% pass (2)

70-79% satisfactory (3)

80-89% good (4)

90-100% excellent (5)

The second repeated - your third - 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: Immunobiology (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)