

**CLINICAL IMMUNOLOGY COURSE**  
**Faculty of Medicine, 2<sup>nd</sup> year, AY 2022/2023**  
**Course information & regulations**

**1. The course schedule**

- The Clinical Immunology course covers 70 didactic hours during spring semester:
  - 20 lecture hours (10 meetings), MS TEAMS
  - 44 class hours (10 meetings a 4 hours, 2 meetings a 2 hours),
  - 6 seminar hours (2 meetings a 3 hours).
- The detailed schedule of course meetings (classes, seminars, lectures) and consultation hours are to be presented during the first course meeting, as well as are posted at the Department's notice board (Department of Clinical Immunology Office, Tytusa Chałubinskiego 5 Str., Wrocław), posted at the <https://www.umw.edu.pl/pl/jednostki/katedra-i-zaklad-immunologii-klinicznej> and on MS TEAM
- Students are asked to check MS TEAMS regularly for information including educational materials.  
**MS TEAMS: Clinical Immunology 2yED (main channel and group channel)**  
<https://teams.microsoft.com/l/channel/19%3afxUDFEFmaiNbjMxy4YsrgbDWisWBJb-fjwA65VVvkGg1%40thread.tacv2/Og%25C3%25B3lny?groupId=39bcb191-c8af-436f-b8c2-189349f4df6f&tenantId=c49499a2-f68e-48a6-8885-7b5d4eaa01a3>

**2. Recommended literature**

- **Basic literature** (list according to importance):
  - ✓ K. Abbas, A. H. Lichtman, S. Pillai: **"Basic Immunology. Functions and disorders of the immune system"**; Elsevier Saunders 6<sup>th</sup> Edition, 2019.
  - ✓ K. Abbas, A. H. Lichtman, S. Pillai: **"Cellular and Molecular Immunology"**; 9<sup>th</sup> Edition, Elsevier, 2017.
  - ✓ M. Peakman, D. Vergani: **"Basic and Clinical Immunology"**; 2<sup>nd</sup> edition, Elsevier – Churchill Livingstone, 2009 Nature reviews. Immunology. Nature New York, London.
- **Additional literature and other materials:**
  - ✓ D. Male, J. Brostoff, D. Roth & I. Roitt: **"Immunology"**, 8<sup>th</sup> Edition, Elsevier, 2013.
  - ✓ **"Allergy: European Journal of Allergy and Clinical Immunology"**; Wiley Blackwell, Journal of Allergy and Clinical Immunology. Elsevier.

**3. Course conditions**

- **Basic:**
  - ✓ Before the practical training students are supposed to get familiar with the Occupational Health and Safety regulations (OHS) of the lab work, as well as with the current Study

Regulations statements. This fact is to be confirmed by an individual student signature. Otherwise, a student is not admitted to the course meetings.

- ✓ Protective clothing (lab gowns) is obligatory during classes; lack of the clothing results in no admittance to the given class, with documented absence for the class. Overcoats should be obligatory left in a designated area.
- ✓ It is not allowed to use mobiles or other similar devices during the course meetings. It is not allowed to eat nor drink during the course meetings.
- ✓ In case of handling that is contrary to the generally accepted social behavior or not respecting the general Study Regulations or the Department Regulations, a student will be taken off from the given class or seminar, with no credit for this class or seminar.
- ✓ Students are expected to know the names of the Clinical Immunology course teachers and lecturers for the sake of easier communication.
- ✓ All the other didactic issues, coming out during the term, are to be reported to the didactic supervising assistant professor. The adequate decisions will be made upon discussion with the Head of the Department of Clinical Immunology.

- **Attendance (according to Study Regulations Art.13):**

- ✓ Student's presence at classes, seminars and lectures (100%) is obligatory and will be documented.
- ✓ Each absence should be justified and worked-up before the nearest colloquium. The justification note copy should be provided during the first course meeting following the absence.
- ✓ A student may have up to 3 justified absences. The justified absences should be worked-up at a course meeting (a class or a seminar) on the same topic, once agreed before the meeting with a teacher giving the class or seminar. If this is impossible, the topic should be credited during the appropriate teacher consultation hours, but not later than before the nearest colloquium. Random event absences may be worked-up and credited on individual decision of the didactic supervising assistant professor.
- ✓ In case of cancelled classes due to rector's / dean's hours / days at student's request, the classes will be conducted on a different date agreed with the teacher or in groups of 4-6 students prepare essays / presentations on a fixed topic.
- ✓ Individual class exchange between groups is not possible, unless previously agreed with the lecturer and only aiming at the class work-up.
- ✓ A student that re-takes a whole year or a semester is not obliged to re-take the previously credited Immunology course, unless the teaching program has changed.

- **Verifying the knowledge:**

- ✓ Students' knowledge will be verified systematically. Students are obliged to attend the classes prepared with the whole earlier re-worked topics and issues, including lectures. Approximately a week earlier students will receive a presentation with a list of issues applicable for the next meeting.
- ✓ **During each meeting, students will answer questions referring to the last class. Students are asked randomly, each student must have a grade from the oral answer, for a positive answer the student gets points (2 or 3).** In case of failing, the topic should be credited at the appropriate teacher consultation hours. In case of failing students are obliged to credit topic before earliest following mid-term colloquium.
- ✓ There are **two scheduled seminars**, at meeting 7 and 12. To credit a seminar, students are obliged to prepare in groups short **presentations (15 minutes each) on given topics**. The topics will be announced 3 weeks before the seminar. The topic presenting group should hand out a printed copy of the presentation, to provide the work documentation.
- ✓ There are **two scheduled mid-term written colloquia**, at seminars 6 and 12 (MCQ tests of 20 questions each, the threshold to credit the test are 12 correct answers each = 60%). The test results are to be announced at the subsequent course meeting. **Failing any of the colloquium obligates a student to credit all the topics covered by the colloquium during a teacher consultation hours (20 question written test + oral answer), no later than before the next colloquium (final score: the mean of the failed and improved test will be taken).**

- **Conditions to receive credit for the course:**

- ✓ passing all practical exercises
- ✓ justification and credit for absences
- ✓ passing the oral answer (2 or 3 pts)
- ✓ credit for two seminar presentations
- ✓ credit for two mid-term written colloquia (from each at least 12 pts)
  
- ✓ **Student may obtain maximum of 43 points from 2 mid-term colloquia (max. 2x20 pts) and oral answer (max. 3 pts), upon acquire minimal score of 26 points** student will credit the course with a grade:
  - 40-43 pts - very good (5,0)
  - 37-39 pts - four and a half (4,5)
  - 33-36 pts - good (4,0)
  - 30-32 pts - three and a half (3,5)
  - 26-29 pts - satisfactory (3,0)

- ✓ Students who did not obtain 26 points, during the one before last meeting will write a final test on the entire material (MCQ test - 30 questions, the pass threshold is 18 correct answers) and will credit the course:
  - 18 - 30 pts - satisfactory (3,0) ≥60%
  - 17 pts and less - unsatisfactory (2,0)
- ✓ The final colloquium retake is scheduled once (during the last course meeting). In case of failed re-take, the Study Regulation procedures apply, Art.34. The results of the final colloquium are to be announced on the following day, at the Department notice board.
- ✓ The deadline for obtaining credit for the course and admission to the exam session is Thursday, 12:00 on 2<sup>nd</sup> of February 2023.

• **EXAM:**

- ✓ The Immunology course ends-up with a written exam, a 50-question MCQ test. The exam issues cover classes, seminars and lectures, as well as the recommended literature. The grade scale for the exam is:
  - 47-50 pts - very good (5,0)
  - 43-46 pts - four and a half (4,5)
  - 39-42 pts - good (4,0)
  - 35-38 pts - three and a half (3,5)
  - 30-34 pts - satisfactory (3,0) ≥60%
  - 29 pts and less - unsatisfactory (2,0).
- ✓ The exam results are to be announced during the next 3 days, at the Department notice board.
- ✓ A student has the right to look at each his evaluated written work during 2 weeks following the result announcement, or later, once agreed with an examining or a teaching person (Study Regulations Art.43).
- ✓ At the request of an academic teacher conducting the test, or exam, the student is required to confirm his identity by showing a student ID card or other document (Study Regulations Art.30:5).
- ✓ If the student was unable to participate in the exam (for example due to illness), no later than three days after the exam, he should present a document confirming his absence and an application for reactivation of examination (available at the ED office) in the Department of Clinical Immunology (Study Regulations art.40).

#### **4. Educational results for a student**

- Knows the basics of the immune system development and functioning, in particular mechanisms of specific and nonspecific humoral and cellular immune response. Describes the development and the role of individual components of the immune system. Clarifies the regulation of the immune response. Characterizes the specific and non-specific mechanisms of humoral and cellular immunity.
- Describes the major histocompatibility complex. Explains the role and mechanism of action of the major histocompatibility complex.
- Knows the types of hypersensitivity reactions, immune deficiencies as well as basics of the immune modulation. Characterizes various types of hypersensitivity reactions and explains the pathomechanisms of diseases of hypersensitivity. Describes the pathogenesis of primary and secondary immunodeficiencies. Explains the mechanisms of immunomodulation.
- Knows the issues of the neoplasm immunity. Characterizes by basic concepts of tumor immunology.
- Describes the genetic background of the transplant donor and recipient selection as well as the basics of the transplant immunity. Describes the basic concepts of transplant immunology and explains the basis for the selection of the donor and recipient.
- Knows the basic directions of the therapy development, in particular the cell therapy, gene therapy and targeted therapy in different diseases. Clarifies the regulation of the immune response in allergic diseases, autoimmune and proliferative diseases of the immune system. Characterizes different forms of immunotherapy.
- Applies the antigen-antibody reactions in current modifications and tests for the diagnostics of infectious, allergic, autoimmune, hematology and neoplastic diseases. Selects appropriate diagnostic methods for the detection of immunodeficiency, allergic diseases, autoimmune and proliferative diseases of the immune system.
- Relates the tissue and organ damage to the clinical symptoms of the disease, anamnesis and laboratory tests. Differentiate symptoms of immunocompromise. Correctly interprets the results of diagnostic studies evaluating the immune system.
- Analyses the processes of reaction, defence and adaptation as well as disturbances of the regulation in response to an etiologic factor. Properly analyzes clinical cases concerning disturbances in the immune system.

**Person supervising the didactic issues for English Division**

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**Person responsible for the course:**

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