

## CHART OF DISCIPLINE/ SYLLABUS

### 1. 1. Study Program Data

1.1 High Education Institution	UNIVERSITATEA DE MEDICINĂ ȘI FARMACIE "VICTOR BABEȘ" TIMIȘOARA
1.2 Faculty	FACULTATEA DE MEDICINĂ
1.3 Department	XIII
1.4 Study Domain1)	MEDICINĂ GENERALĂ
1.5 Cycle Studies2)	V
1.6 Study programme/ Qualification	IMMUNOPATHOLOGY

### 2. Course Data

2.1.Course/Department	IMMUNOPATHOLOGY						
2.2 Course tutors	1. PROF. DR. IĂZUREANU ELENA VOICHIȚA						
2.3 Practical activity tutors							
2.4. Year of study	V	2.5. Semester	II	2.6. Assessment	C	2.7. Course rank	F

### 3. Duration/Estimated Time (number of hours/ semester of teaching activity)

3.1 Number of hours/ week	1	3.2 lecture/course	1	3.3 laboratory	-
3.4 Total hours of curriculum	14	3.5 lecture/course	1	3.6. laboratory	-
<b>Time distribution for course activities</b>					<b>hours</b>
Study by manual, course support, bibliography and notes					10
Additional documentation in the library, on the specialized electronic platforms / on the ground					10
Training seminars / laboratories, themes, papers, portfolios and essays					0
Examinations					4
Tutoring					6
Other activities					
3.7.Total individual study hours	30				
3.8. Total hours/ semester	14				



3.9. Number of credits	1
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#### 4. Preconditions

4.1. Curriculum	Students should be familiar with the basic notions of Biochemistry, Immunology, Medical Microbiology, Pathophysiology.
4.2. Practical activities/seminars/projects studied curriculum, basic skills/ rules for attending the course	-

#### 5. Condition

5.1. Courses	<ul style="list-style-type: none"> <li>Objectives of the discipline: immunopathology course and practice have the main objectives: knowlges regarding etiopathogenesis, epidemiology, clinical manifestations, positive and differential diagnosis, complications and sequelae.</li> </ul>
5.2. Laboratory/practical activity/ project	-

#### 6. Key competencies and basic skills

<b>Professional Competencies</b>	1. Knowledge, understanding, explanation and interpretation: <ul style="list-style-type: none"> <li>➤ Knowledge and appropriate use of immunopathology specific notions</li> <li>➤ Knowledge of diagnostic criteria for major immunopathology diseases.</li> <li>➤ Knowledge and explanation of the main pathogenic mechanisms of immunopathology</li> </ul>
<b>Transversal Competencies</b>	2. Instrumental-applicative: <ul style="list-style-type: none"> <li>□ Design and evaluation of practical activities</li> </ul>

	<p>specific to immunopathology discipline.</p> <p><input type="checkbox"/> Correct application of harvesting techniques and processing of biological products.</p> <p><input type="checkbox"/> Use of general and particular methods for exploring different devices and systems.</p>
	<p>3. Attitude:</p> <p><input type="checkbox"/> Own participation, active at scientific manifestations in the field (clinical studies).</p> <p><input type="checkbox"/> Creative potential in collective activities.</p> <p><input type="checkbox"/> Use of knowledge through exchanges of experiences.</p> <p><input type="checkbox"/> Own professional development.</p> <p><input type="checkbox"/> Involvement in institutional development and promotion of scientific research.</p>

#### 7. Disciplines/Course objectives

7.1 Disciplines/Course general objectives	Diagnosing and treating an immunopathology disease.
7.2 Disciplines/Course specific objectives	

#### 8. Content

Courses	
Teaching-learning, methods	Seminars/ Laboratory/practical activity/ project
<p>1. Cells of the immune system. T, B, NK lymphocytes. Antigen-presenting cells. The monocytes-macrophage system. Other cells involved in the immune response</p> <p>2. Hematopoiesis. Organs of the immune system: primary and secondary lymphoid organelle</p> <p>3. The major antigens of histocompatibility MHC, the HLA system</p>	-



<p>4. Adhesion molecules, cytokines, second messengers.</p> <p>5. Humoral immune response: primary immune response, secondary immune response. Cellular immune response</p> <p>6. Hypersensitivity reactions type I, II, III, IV</p> <p>7. Blood groups. Alloimmune and autoimmune hemolytic anemias. Cytopenia.</p> <p>8. Neoplastic hematological diseases: leukemias, lymphomas</p> <p>9. Tolerance and autoimmune diseases musculoskeletal and connective tissue. Autoimmune organ diseases (integuments, gastrointestinal, respiratory, renal, metabolic)</p> <p>10. Transplant immunology. The rejection. Anti-infective immunity</p> <p>11. Antitumor immunity. Immunodeficiencies.</p> <p>12. Interactions of the immune system with the neuroendocrine system</p> <p>13. Vaccines. Historian. Overview. Types of vaccine. The vaccine antipoliomielitic, flu, dittero-tetano-pertussis, antihepatitis A, antimeasles-rubella-orreillon, antirotaviruses, antivaricella.</p>	
<p style="text-align: center;">Required bibliography</p> <p>1. IMUNOPATOLOGIE -CARTE.</p>	

8.1. Courses	Teaching-learning, methods	Notification
	Interactive exposure of the material using multimedia tools, Powerpoint presentations.	-
8.2 Seminars/ Laboratory/practical activity/ projects	Teaching-learning, methods	Notification

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**9. Correlations between the content of the course and the requirements of the professional field and relevant employers**

- Acquiring appropriate medical language by the student.
- Student acquiring theoretical and practical notions of immunopathology
- Correlation of theoretical notions with practical analysis of cases of immunopathology.

**10. Assessment**

• Average of seminar grades / practical works	30%		
• Notes obtained from periodic or partial tests	-		
• Activity and frequency rating	-		
• Notes for homework, essays, translations, case studies	-		
• Notes for participation in scientific circles and / or professional competitions	-		
• Final examination score	- 70%		
• Other notes	-		
Study hours			
1. studying course notes	10	8. preparation oral presentations	0
2. study after manual, course support	6	9. final examination preparation	6
3. Study of the minimum bibliography indicated	4	10. Consultations	4



4. additional documentation in the library	0	11. Documentation on the net	0
5. specific training activity for seminar / practical works	0	12. other activities	0
6. achievement of homework, essays, papers, projects, translations etc.	0	13. other activities	0
7. Preparation of periodic or partial tests	0	14. other activities	0

**Total hours= 30**

Activity	10.1 Assessment criteries	10.2 Assessment methods	10.3 Percentage of the final grade
10.4. Cours	-	-	-
10.5. Seminar/laboratory	-	-	-
<b>10.6 Minimum performance standard-basic knowledge</b>  <b>Minimum promotion requirements (for grade 5):</b> -the presence in the practical works (80%), - obligatory recovery of absences, - the acquisition of specialized terminology and its use in context adequately, -knowledge of diagnostic criteria for immunopathology disease.  <b>Maximum Promotion Requirements (for grade 10):</b> -the presence in the practical works (80%), - obligatory recovery of absences, - the acquisition of specialized terminology and its use in context adequately, -knowledge of diagnostic criteria for major immunopathology disease - knowledge and explanation of the main pathogenic mechanisms of immunopathology disease			

Date	Signature of the course holder 1. PROF. DR. ELENA VOICHIȚA	Signature of the laboratory/seminar holder
Signature of the Head of Discipline	PROF. DR. LĂZUȚA VOICHIȚA	
Date of approval in the Department 13.04.2023	Signature of the Head of Department CONF.UNIV.DR. OVIDIU MLADINESCU-FIRA	



