



Ahvaz Jundishapur University of Medical Sciences

**Daily lesson plan form**  
**Vice Chancellor for Education Development of Ahvaz University of Medical Sciences**  
**Center for the Study and Development of Medical Education**

<b>Course Title: Clinical Immunology</b>	<b>Section number: 1</b>	<b>Number of units: 1</b>	<b>Second semester of the Academic year 2025-2026</b>		<b>Educational field: Classroom</b>		
<b>Section Topic: Hypersensitivity Reactions (Type I)</b>	<b>Audience: General medical students</b>		<b>Faculty of Medicine</b>		<b>Presenter: Dr. Afshin Amari</b>		
<b>General purpose:</b>							
<b>Behavioral purposes:</b> After the section the learner will be able to:	Field	Teaching method	Activities while teaching		Educational aids	Time (minutes)	Assessment – Complementary activities Ask question of major goals:
			Professor	Learner			
At the end the learners are expected to: 1- Understand the concept of hypersensitivity and allergy. 2- Learn the mechanism of formation of type I hypersensitivity. 3- Explain the most important ways to treat allergies. 4- Recognize the most important early and delayed inflammatory mediators that cause allergies.	Cognitive	-Lecture -Students participation in the discussion in the form of question and answer using educational aids, whiteboard, video projector	*	*			1-Ask students at the beginning of the next session about the topics taught in the previous session in order to be more prepared. 2-Encourage students to in-depth studies and seminars 3- Encourage reading of books in English and not Persian in order to strengthen students' English 4- Written exam and positively impact the students class activities

**References:**

- 1- Cellular and Molecular Immunology
- 2- Kuby Immunology
- 3- Medical Immunology
- 4- Janeway's Immunobiology
- 5- Cellular and Molecular Immunology ABBAss-AbulK
- 6- Reliable Electronic Journals



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<b>Course Title: Clinical Immunology</b>	<b>Section number: 2</b>	<b>Number of units: 1</b>	<b>Second semester of the Academic year 2025-2026</b>	<b>Educational field: Classroom</b>			
<b>Section Topic: Hypersensitivity Reactions (Types II, III, IV)</b>	<b>Audience: General medical students</b>		<b>Faculty of Medicine</b>	<b>Presenter: Dr. Afshin Amari</b>			
<b>General purpose:</b>							
<b>Behavioral purposes:</b> After the section the learner will be able to:	Field	Teaching method	Activities while teaching		Educational aids	Time (minutes)	Assessment – Complementary activities Ask question of major goals:
			Professor	Learner			
At the end the learners are expected to:  1- Recognize and distinguish the formation mechanism of each hypersensitivity of II, III and IV.  2- Identify the diseases associated with the occurrence of hypersensitivity types II, III and IV and describe the mechanism of occurrence and ways of treatment of each.	Cognitive	-Lecture -Students participation in the discussion in the form of question and answer using educational aids, whiteboard, video projector	*	*			1-Ask students at the beginning of the next session about the topics taught in the previous session in order to be more prepared. 2-Encourage students to in-depth studies and seminars 3- Encourage reading of books in English and not Persian in order to strengthen students' English 4- Written exam and positively impact the students class activities

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- 1- Cellular and Molecular Immunology
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<b>Course Title: Clinical Immunology</b>	<b>Section number: 3</b>	<b>Number of units: 1</b>	<b>Second semester of the Academic year 2025-2026</b>		<b>Educational field: Classroom</b>		
<b>Section Topic: Vaccines and Vaccination</b>	<b>Audience: General medical students</b>		<b>Faculty of Medicine</b>		<b>Presenter: Dr. Ali Asadirad</b>		
<b>General purpose:</b>							
<b>Behavioral purposes:</b> After the section the learner will be able to:	Field	Teaching method	Activities while teaching		Educational aids	Time (minutes)	Assessment – Complementary activities Ask question of major goals:
			Professor	Learner			
At the end the learners are expected to:  1- Understand the importance of immunology in the design of vaccines and the prevention of infectious diseases.  2- Understand the various mechanisms and platforms of vaccine design.  3- Identify and describe the most important strategies to improve the effectiveness of vaccines, including adjuvants.	Cognitive	-Lecture -Students participation in the discussion in the form of question and answer using educational aids, whiteboard, video projector	*	*			1-Ask students at the beginning of the next session about the topics taught in the previous session in order to be more prepared. 2-Encourage students to in-depth studies and seminars 3- Encourage reading of books in English and not Persian in order to strengthen students' English 4- Written exam and positively impact the students class activities

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- 1- Cellular and Molecular Immunology
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<b>Course Title: Clinical Immunology</b>	<b>Section number: 4</b>	<b>Number of units: 1</b>	<b>Second semester of the Academic year 2025-2026</b>		<b>Educational field: Classroom</b>		
<b>Section Topic: Immunohematology</b>	<b>Audience: General medical students</b>		<b>Faculty of Medicine</b>		<b>Presenter: Dr. Ali Asadirad</b>		
<b>General purpose:</b>							
<b>Behavioral purposes:</b> After the section the learner will be able to:	Field	Teaching method	Activities while teaching		Educational aids	Time (minutes)	Assessment – Complementary activities Ask question of major goals:
			Professor	Learner			
At the end the learners are expected to:  1- Learn the role of the immune system in the formation of different blood groups. 2- Recognize the antigens associated with each blood group and their role in the development of hemolytic diseases caused by blood transfusions. 3- Identify a variety of blood products, including pack cells, fresh frozen plasma, platelets etc. and describe the role of each in the treatment of hemolytic diseases. 4- Explain the mechanism of newborn hemolytic diseases and identify their types.	Cognitive	-Lecture -Students participation in the discussion in the form of question and answer using educational aids, whiteboard, video projector	*	*			1-Ask students at the beginning of the next session about the topics taught in the previous session in order to be more prepared. 2-Encourage students to in-depth studies and seminars 3- Encourage reading of books in English and not Persian in order to strengthen students' English 4- Written exam and positively impact the students class activities

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<b>Course Title: Clinical Immunology</b>	<b>Section number: 5</b>	<b>Number of units: 1</b>	<b>Second semester of the Academic year 2025-2026</b>	<b>Educational field: Classroom</b>
<b>Section Topic: Immune System Defense Mechanisms Against Microbes</b>	<b>Audience: General medical students</b>	<b>Faculty of Medicine</b>	<b>Presenter: Dr. Mehri Ghafourian</b>	

**General purpose:**

<b>Behavioral purposes:</b> After the section the learner will be able to:	Field	Teaching method	Activities while teaching		Educational aids	Time (minutes)	Assessment – Complementary activities Ask question of major goals:
			Professor	Learner			
At the end the learners are expected to:  1- Recognize the most important defense mechanisms related to innate and acquired immunity against infectious agents. 2- Describe the physical and chemical barriers of innate immunity against microbes. 3- Recognize the most important phagocytic cells in the body and explain the role of each separately. 4- Describe antibody-dependent defense mechanisms. 5- Describe how ADCC, phagocytosis, and extracellular killing occur.	Cognitive	-Lecture -Students participation in the discussion in the form of question and answer using educational aids, whiteboard, video projector	*	*			1-Ask students at the beginning of the next session about the topics taught in the previous session in order to be more prepared. 2-Encourage students to in-depth studies and seminars 3- Encourage reading of books in English and not Persian in order to strengthen students' English 4- Written exam and positively impact the students class activities

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<b>Course Title: Clinical Immunology</b>	<b>Section number: 6</b>	<b>Number of units: 1</b>	<b>Second semester of the Academic year 2025-2026</b>	<b>Educational field: Classroom</b>
<b>Section Topic: Autoimmunity and its related diseases</b>	<b>Audience: General medical students</b>		<b>Faculty of Medicine</b>	<b>Presenter: Dr. Mehri Ghafourian</b>

**General purpose:**

<b>Behavioral purposes:</b> After the section the learner will be able to:	Field	Teaching method	Activities while teaching		Educational aids	Time (minutes)	Assessment – Complementary activities Ask question of major goals:
			Professor	Learner			
At the end the learners are expected to: 1- Explain the concept of autoimmunity and get acquainted with different types of autoimmune diseases. 2- Understand the mechanism of local and diffused (systemic) autoimmune diseases. 3- Understand the evolutionary stages of T lymphocytes and their role in the development or non-occurrence of autoimmunity. 4- Get acquainted with the concept of autoantigen and know the most important autoantigens involved in autoimmune diseases. 5- Recognize the laboratory tests related to the detection of important autoantigens involved in autoimmune diseases.	Cognitive	-Lecture -Students participation in the discussion in the form of question and answer using educational aids, whiteboard, video projector	*	*			1-Ask students at the beginning of the next session about the topics taught in the previous session in order to be more prepared. 2-Encourage students to in-depth studies and seminars 3- Encourage reading of books in English and not Persian in order to strengthen students' English 4- Written exam and positively impact the students class activities

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Course Title: Clinical Immunology	Section number: 7	Number of units: 1	Second semester of the Academic year 2025-2026	Educational field: Classroom
Section Topic: Cancer and Common Immunotherapy Methods	Audience: General medical students		Faculty of Medicine	Presenter: Dr. Ali Khodadadi

**General purpose:**

Behavioral purposes: After the section the learner will be able to:	Field	Teaching method	Activities while teaching		Educational aids	Time (minutes)	Assessment – Complementary activities Ask question of major goals:
			Profe ssor	Learner			
At the end the learners are expected to:  1- Explain the role of immune cells, including NK and T cells, in preventing cancer. 2- Describe the most important mechanisms of tumor escape from the immune system. 3- Understand the role of monoclonal antibodies in the treatment of various cancers and get acquainted with their design mechanism and effect. 4- Learn the most important methods of tumor immunotherapy.	Cognitive	-Lecture -Students participation in the discussion in the form of question and answer using educational aids, whiteboard, video projector	*	*			1-Ask students at the beginning of the next session about the topics taught in the previous session in order to be more prepared. 2-Encourage students to in-depth studies and seminars 3- Encourage reading of books in English and not Persian in order to strengthen students' English 4- Written exam and positively impact the students class activities

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<b>Course Title: Clinical Immunology</b>	<b>Section number: 8</b>	<b>Number of units: 1</b>	<b>Second semester of the Academic year 2025-2026</b>		<b>Educational field: Classroom</b>		
<b>Section Topic: Immunoproliferative Disorders</b>	<b>Audience: General medical students</b>		<b>Faculty of Medicine</b>		<b>Presenter: Dr. Ali Khodadadi</b>		
<b>General purpose:</b>							
<b>Behavioral purposes:</b> After the section the learner will be able to:	Field	Teaching method	Activities while teaching		Educational aids	Time (minutes)	Assessment – Complementary activities Ask question of major goals:
			Professor	Learner			
At the end the learners are expected to:  Identify and describe the mechanisms of occurrence, the most important treatment strategies and types of diseases related to abnormal proliferation of B lymphocytes, T lymphocytes and NK cells.	Cognitive	-Lecture -Students participation in the discussion in the form of question and answer using educational aids, whiteboard, video projector	*	*			1-Ask students at the beginning of the next session about the topics taught in the previous session in order to be more prepared. 2-Encourage students to in-depth studies and seminars 3- Encourage reading of books in English and not Persian in order to strengthen students' English 4- Written exam and positively impact the students class activities

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<b>Course Title: Clinical Immunology</b>	<b>Section number: 9</b>	<b>Number of units: 1</b>	<b>Second semester of the Academic year 2025-2026</b>	<b>Educational field: Classroom</b>
<b>Section Topic: Immunodeficiency Disorders (Congenital - Acquired)</b>	<b>Audience: General medical students</b>		<b>Faculty of Medicine</b>	<b>Presenter: Dr. Ali Asadirad</b>

**General purpose:**

<b>Behavioral purposes:</b> After the section the learner will be able to:	Field	Teaching method	Activities while teaching		Educational aids	Time (minutes)	Assessment – Complementary activities Ask question of major goals:
			Professor	Learner			
At the end the learners are expected to:  1- Explain the types of immunodeficiency diseases. 2- Explain the immune deficiencies associated with antibodies and their treatment strategies. 3- Recognize immunodeficiency diseases related to cellular immunity. 4- Describe the most important mutations involved in the development of immunodeficiency diseases. 5- Recognize laboratory signs and the most important tests in the correct diagnosis of immunodeficiency diseases.	Cognitive	-Lecture -Students participation in the discussion in the form of question and answer using educational aids, whiteboard, video projector	*	*			1-Ask students at the beginning of the next session about the topics taught in the previous session in order to be more prepared. 2-Encourage students to in-depth studies and seminars 3- Encourage reading of books in English and not Persian in order to strengthen students' English 4- Written exam and positively impact the students class activities

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