Course plan

Year: 2025	**Semester:** ■First,▢Second,▢Summer	**Number of students: 7**
Major: General Medicine	■Basic sciences, ▢Physiopathology	**Department:** Immunology
Course Title: Medical Immunology	■Theoretical, ▢Practical	**Credit:** **Code N.:** 231
Prerequisite:	**Day & Time:** Saturday,8-10	**Course type:**
Instructor: DR. Pordel	**Office address:**	**Tel:** 09171747335
Email: safoora.pordel@gmail.com	**Response Hours and Days:**	**Student representative name and mobile number:**

Main objective:

- . To familiarize medical students with the principles and foundations of immunology, the immunological causes of diseases, and the recognition of diseases that are directly or indirectly related to dysfunction in the immune system.
-.To familiarize medical students with the applications of this science for the recognition, prevention, diagnosis, and treatment of diseases.

- . During this course, students should be familiar with:

1- Become familiar with the definition and history of immunology, general principles of innate and specific immunity, and types of immunization.
2- Become familiar with the cells involved in specific immunity (lymphocytes, phagocytes, and granulocytes), introduce the tissues involved in specific immunity: bone marrow, thymus, lymphatic system and nodes, spleen and mucosal lymphatic system.
3- Become familiar with antigens, immunogens, epitopes, and their types, and superantigens, and thymus-independent and dependent antigens.
4- Become familiar with the structural and functional characteristics of antibodies, types of immunoglobulin classes, and the functions and characteristics of each.
5- Become familiar with innate immunity and inflammation and inflammatory cells (benefits of inflammation, mechanisms involved in inflammation, activation of the endothelium and the recruitment of leukocytes, inflammatory mediators).
6- Become familiar with the genetics and structure of the major histocompatibility complex (MHC) and its role in the formation of responses against protein antigens.
7- Become familiar with antigen presentation to T cells through the cytosolic and exogenous pathways.
8- Become familiar with the mechanisms of humoral immunity and an overview of B cell development.
9- Become familiar with the mechanisms of cellular immunity and an overview of T cells and how they respond to and eliminate antigens.
10- Become familiar with central and peripheral tolerance in T and B cells and the mechanism of autoimmune failure and induction.
11- Become familiar with cytokines (types, structure, and function, producing cells, cytokine receptors and signal transmission by these receptors into the cell).

References (Text books):

1- 1- Abu al-Abbas's Immunology Reference Book, 2024, Chapters 1-16
2- 2- Robbins' Pathology, Latest Edition

Student evaluation and the value related to each evaluation:

(The assessment tools that will be used to test student ability to understand the course material and gain the skills and competencies stated in learning outcomes)

ASSESSMENT TOOLS	From
Assignments	-

Quiz	2
Presence in online courses	-
Midterm Exam	8
Final Exam (Written exam)	10
TOTAL MARKS	**20**

Students responsibilities:

1- Mobile phones must be turned off during class or exams.
2- Attending class on time
3- It is necessary for the student to attend all class hours. Unexcused absence during the course will result in a grade deduction.

Discipline and educational rules:

1- It is applied according to the regulations of the educational regulations.

Mid exam date: **Final exam date:**

Row	date	Time	Topic	Professor	References	Chapter	Pages
1	11/October	8-10	Definition and history of immunology, general principles of innate and specific immunity, and types of immunization	Dr.Pordel			
2	13/October	8-10	Introduction to cells involved in specific immunity (lymphocytes, phagocytes, and granulocytes) Introduction to tissues involved in specific immunity: bone marrow, thymus, lymphatic system and nodes, spleen, and mucosal lymphatic system	Dr.Pordel			
3	18/October	8-10	Antigens, immunogens, epitopes and their variants, and thymus-independent and thymus-dependent superantigens and antigens	Dr.Pordel			
4	20/October	8-10	Structural and functional characteristics of antibodies, types of immunoglobulin classes, and the functions and properties of each.	Dr.Pordel			
5	25/October	8-10	Innate immunity and inflammation and inflammatory cells (benefits of inflammation, mechanisms involved in inflammation, activation of the endothelium and recruitment of leukocytes, inflammatory mediators)	Dr.Pordel			
6	1/November	8-10	Complement system (receptors of this system, functions, how the complement system is regulated, diseases related to the complement system and inhibitory receptors)	Dr.Pordel			

7	8/November	8-10	Genetics and structure of the major histocompatibility complex (MHC) and its role in the formation of responses against protein antigens)	Dr.Pordel			
8	15/November	8-10	Antigen presentation to T cells: cytosolic and extrinsic pathways	Dr.Pordel			
9	22/November	8-10	Mechanisms of humoral immunity and an overview of B cell development	Dr.Pordel			
10	29/November	8-10	Mechanisms of cellular immunity and an overview of T cells and how they respond to and eliminate antigens	Dr.Pordel			
11	1/November	8-10	Central and peripheral tolerance in T and B cells and the mechanism of failure and induction of autoimmunity	Dr.Pordel			
12	6/December	8-10	Cytokines (types, structure, function, producing cells, cytokine receptors and signal transduction by these receptors into the cell)	Dr.Pordel			