



Department of pharmacy

Paytaxt Private Institute

Subject: Immunology

Course Book :(1st Year , 2nd semester)

Lecturer's name: Muzhda H.Saber

Academic Year: 2020-2021

Course Book

1. Course name	Immunology
2. Lecturer in charge	2020-2021
3. Department/ College	Department of pharmacy Paytaxt Private Institute
4. Contact	e-mail : muzhda.haedar@gmail.com 0750 7725801
5. Time (in hours) per week	Theory: 2 Practical: 2
6. Office hours	Saturday: 11:30 – 12:30 Tuesday: 10:30- 11:30
7. Course code	2 ^{sec} semester
8. Course overview:	This course, which consists of (2) hour lecture & (3) hrs lab per week for (20) weeks, is an introduction to Immunology, and how to knowing different mechanisms of immune systems about their ability to protect against different forging substance and different type and mechanisms of the immune systems.
9. Student's obligation	The students should be attendance and complete of all tests, exams and assignments
10. Forms of teaching	PPT and video presentations of the lectures

11. Assessment scheme

Breakdown of overall assessment and examination

Midyear (theoretical 15%, practical 25% exams & quizzes) = 40

Final exam 60%

Total 100%

❖ Theoretical lectures content

Unit	content
1	Innate immunity
2	Adaptive immunity
3	Antigens
4	Antibodies (immunoglobulins)
5	Complement system
6	Lymphatic tissues and organs
7	vaccines
8	Immune regulation
9	Antigen-antibody reaction
10	autoimmunity
11	Tumor immunology
12	Viral immunity
13	Bacterial, Parasite and protozoan immunity
14	immunodeficiency
15	immunotherapy

❖ **Practical lab. Practical lab. Objectives**

The Laboratory is set up to make the student understand the important techniques that is necessary and to be familiar with the equipments , instruments, chemical and reagents that used in the laboratory for the tests.

❖ **Practical lab. Content**

Unit	Outline
1	Introduction to immunology lab and general lab instructions
2	Bactericidal power of normal serum
3	Preparation of immunization agent: ✓ Viral vaccine. ✓ Erythrocyte vaccine. ✓ Protein vaccine. ✓ Bacterial vaccine (Bacterins).
4	ABO system and compatibility test (cross-matching test
5	Anti-Streptolysin O test (ASO test).
6	C- reactive protein test
7	H. Pylori test
8	Pregnancy test

9	Tumor Markers	
10	TORCH	
11	Widal-test	
12	Rose Bengal test	
13	Pregnancy test	
14	VDRL & TPHA	
15	Enzyme Linked Immunosorbent Assay (ELISA).	

Methods of Instruction

The following strategies and techniques are use in the instructional delivery process:

1. Lecture, discussion, and demonstrations
2. Data show presentations
3. Pre-lab and post-lab discussions
4. Independent and group work in lab procedures

12. Examinations:

1. *Compositional:* In this type of exam the questions usually starts with Explain how, What are the reasons for...?, Why...?, How....?

With their typical answers

Examples should be provided

2. *True or false type of exams:*

In this type of exam a short sentence about a specific subject will be provided, and then students will comment on the trueness or falseness of this particular sentence. Examples should be provided

3. *Multiple choices:*

In this type of exam there will be a number of phrases next or below a statement, students will match the correct phrase. Examples should be provided.

13. Extra notes:

Non

14. Peer review:

The course book prepared by Mr Pshtiwan Dhahir Majeed is properly arranged, it covers the main requirements of this lesson. The lecturing procedures identified, ways of evaluating the students and lecture topics mentioned, all to gather guarantees best output and successful graduated students.

Lecturer/ Microbiology

Paytaxt Private Institute