

TISHK INTERNATIONAL UNIVERSITY
FACULTY OF APPLIED SCIENCE
Department of MEDICAL ANALYSIS,
-2022 Spring
Course Information for MA 210 IMMUNOLOGY AND CLINICAL IMMUNOLOGY II

Course Name: IMMUNOLOGY AND CLINICAL IMMUNOLOGY II

Code	Regular Semester	Theoretical	Practical	Credits	ECTS
MA 210	4	2	2	3	4

**Name of Lecturer(s)-
Academic Title:** Tola Faraj - PhD
Ramyar Kheder - Assistant Professor

Teaching Assistant: Chnar Hussam

Course Language: English

Course Type: Main

Office Hours Sunday 09:00-11:00

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**Teacher's academic
profile:** Medical Immunology
PhD

Course Objectives: Immunology is a diverse and growing discipline that can be defined as the study of the tissues, cells and molecules involved in host defense mechanisms. Immunologists attempt to understand how the immune system develops, how the body defends itself against disease, and what happens when it all goes wrong. The following are the learning objectives for the MA 210 Immunology, the students will be able to_ 1. Understand Immune-Inflammatory Responses. 2. Describe the roles of the Complement system in the immune responses. 3. Differentiate Antigen, Haptens, Superantigens, and Opsonization. 4. Classify Immunoglobulins. 5. Transfer knowledge of immunology into clinical decision-making through case studies presented in class.

**Course Description
(Course overview):** As part two of the Immunology and Clinical Immunology Course, this will be taught in more detail and will provide further insight into the immune system and immune disorders. As a pertinent subject in medicine, its broad contents cannot be effectively conveyed in a single course and as such this course aims to complete student's education of the core concepts immunology and immunology in a clinical and also examine the topic in more detail.

COURSE CONTENT

Week	Hour	Date	Topic
1	2	4-7/10/2021	Introduction (Spring term, QBank, LNs, Answers Final)
2	2	10-14/10/2021	Immune-Inflammatory Responses
3	2	17-21/10/2021	Complement system
4	2	24-28/10/2021	Antigen, Haptens, Superantigens, and Opsonization
5	2	31/10-4/11/2021	Immunology Scientific Activity
6	2	7-11/11/2021	Immunoglobulins
7	2	14-18/11/2021	Midterm Exam
8	2	21-25/11/2021	Local and Herd immunity
9	2	28/11-2/12/2021	Opsonization
10	2	5-9/12/2021	Immunology Scientific Activity
11	2	12-16/12/2021	Antiviral Immune Response
12	2	19-23/12/2021	Immunisation and Vaccination
13	2	26-30/12/2021	COVID-19 and the immune system

14	2	2-6/1/2022	Autoimmune Disorders
15	2	9-13/1/2022	Final Exam
16	2	16-20/1/2022	Final Exam
COURSE/STUDENT LEARNING OUTCOMES			
1	Local and Herd immunity		
2	Immunisation and Vaccination		
3	Autoimmune Disorders		
4	Immune-Inflammatory Responses		
5	Immunoglobulins		
COURSE'S CONTRIBUTION TO PROGRAM OUTCOMES (Blank : no contribution, I: Introduction, P: Profecient, A: Advanced)			
Program Learning Outcomes			Cont.
1	Evaluate clinical laboratory data by interpreting laboratory results and relating the data to various disease states.		A
2	apply principles of evidence-based medicine to determine clinical diagnoses.		A
3	apply the basic principles of gross and microscopic anatomy, physiology, biochemistry, immunology, microbiology/virology.		A
4	formulate and implement acceptable treatment modalities to various disease states.		A
5	use technology effectively in the delivery of instruction, assessment, and professional development.		A
6	exhibit essential employability qualities by demonstrating laboratory safety, analyzing laboratory results, and displaying professional conduct.		A
7	exhibit organizational skills, accountability, and ethical behavior.		A
8	apply skills needed in operating laboratory equipment for testing, assessing quality assurance for lab equipment, and adhering to standard safety practices in the laboratory environment.		A
9	apply problem-solving and decision-making skills.		A
10	apply and promote health policies and regulatory standards in the field career.		A
11	develop research in the field of medical analysis using qualitative and quantitative methods.		A
Prerequisites (Course Reading List and References):	1. Medical Microbiology & Immunology, Examination & Board Review, eighth edition, Warren Levinson, MD, PhD, Professor of Microbiology, Lange Medical Books/McGraw-Hill. 2. BASIC IMMUNOLOGY Functions and Disorders of the Immune System, FIFTH EDITION, Abul K.		
Student's obligation (Special Requirements):	* Examination Policy: Student Should take 2 exams (mid-term and final exams) during the course in addition to the course activities, quizzes, reports and participation during the classes, there will be no make-up exams for students who have been absent during the exam date without a medical report. * Classroom policies: 1. Attendance_ Students are strongly encouraged to attend class on a regular basis, as participation is important to understand topics and it is a vital opportunity to raise questions and get responses. 2. Lateness_ Lateness to class is disruptive, and this adversely will affect the educational process during the class. 3. Electronic devices_ All cell phones need to be turned off at the beginning of class and put away during the entire class. 4. Talking_ During class please refrain from side conversations. Again these can be disruptive to your classmates and the course lecturer.		
Course Book/Textbook:	Medical Microbiology & Immunology, Examination & Board Review, eighth edition, Warren Levinson, MD, PhD, Professor of Microbiology, Lange Medical Books/McGraw-Hill.		
Other Course Materials/References:	BASIC IMMUNOLOGY Functions and Disorders of the Immune System, FIFTH EDITION, Abul K. Abbas, Andrew H. Lichtman, Shiv Pillai, Elsevier.		
Teaching Methods (Forms of Teaching):	Lectures, Practical sessions, Seminar, Assignments, , ,		
COURSE EVALUATION CRITERIA			
Method		Quantity	Percentage (%)
Attendance		1	5
Quiz		1	10
Midterm Exam		1	20
Presentation		1	10
Laboratory		1	5

Practical Exam	1	10
Final Exam	1	40
Total		100

Examinations: Essay Questions, True-False, Fill in the Blanks, Multiple Choices, Short Answers, Matching, , ,

Extra Notes:

ECTS (ALLOCATED BASED ON STUDENT) WORKLOAD			
Activities	Quantity	Workload Hours for 1 quantity*	Total Workload
Theoretical Hours	16	2	32
Practical Hours	16	2	16
Final Exam	1	10	10
Attendance	1	6	6
Quiz	1	6	6
Midterm Exam	1	6	6
Presentation	1	8	8
Laboratory	1	12	12
Practical Exam	1	6	6
Total Workload			102
ECTS Credit (Total workload/25)			4.08

Peer review

Signature:
Name:
Lecturer

Signature:
Name:
Head of Department

Signature:
Name:
Dean