



وكالة الجامعة للشؤون التعليمية
بحج الدراساتية والتطوير

(5)

(Course Syllabus)

مختصر توصيف

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	BIOL-436	:
	علم الأحياء الدقيقة BIOL-231	:
	-	:
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	4	:
Module Title:	Immunology	
Module ID:	BIOL-436	
Prerequisite (Co-requisite):	General microbiology, BIOL-231	
Co-requisite:	-	
Course Level:	7 th	
Credit Hours:	4	

:(Course Information) *

Module Description

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This course will focus on the basic immunology such as the basic aspects of immunity (concept, function, classification of immunity), brief history of immunity (experience period, classical period, modern period), the main content of clonal selection theory, the difference between innate immunity and acquired immunity, the composition of innate immunity, the main features of specific immunity, the category of immunological study and the branch of immunology and the status, development, and current trend of Immunity in Medicine and Biology.

Module Aims

أهداف المقرر :

	By the end of this course the student will be able to:	
1	Gain critical understanding of key concepts, principles, and practice in immunology.	1
2	Differentiate between natural and acquired immunity.	
3	Understand the different mechanisms by which the immune system works to protect the body.	
4	Understand the different types of antigens and realize the structure, function and different classes of immunoglobulin.	
5	Engage in other more advanced immunology courses.	
6	Appreciate the need for laboratory immunological techniques and can apply these techniques in real work situations.	

Learning Outcomes:

مخرجات التعليم:

1	To master the modern concept of immunity.	
2	To learn about the composition and features of innate immunity and acquired immunity.	
3	To be familiar with the basic function of immunity.	
4	To learn Interpret the observations of antigen antibody tests to identify some infectious diseases and blood typing.	
5	To learn about the brief history and recent developments in immunology, and its status in medicine.	

Course Contents:

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ساعات التدريس (Hours)	الأسابيع (Weeks)	(Subjects)
3	1	Overview to the Immune System
6	2	Cells of the immune system and organs
3	1	Innate immunity
3	1	Antigen Capture and Presentation to Lymphocytes
6	2	Adaptive Immunity
3	1	Complement system
3	1	Immunological Tolerance and Autoimmunity
6	2	Cytokines and chemokines
6	2	Hypersensitivity
6	2	Vaccination

Textbook and References:

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ISBN	Publishing Year	Publisher	اسم المؤلف (رئيسي) Author's Name	Textbook title
145575899X, 9781455758999	2012	Elsevier Health Sciences	Abul K. Abbas and Andrew H. Lichtman	Basic Immunology
	Publishing Year	Publisher	اسم المؤلف (رئيسي) Author's Name	Reference
13: 978-1118396919, 10: 111839691X	2015	John Wiley & Sons Ltd	Richard Coico, Geoffrey Sunshine	Immunology: A Short Course (Paperback) 7 th Ed.
13: 978-0323222754, 10: 0323222757	2014	Amazon Prime	Abul K. Abbas MBBS and Andrew H. H. Lichtman	Cellular and Molecular Immunology, 8e (Cellular and Molecular Immunology, Abbas) 8th Edition

