



Jordan University of Science and Technology
Faculty of Science & Arts
Applied Biological Sciences Department

BIO102 General Biology (2)

First Semester 2017-2018

Course Catalog

3 Credit Hours. This course includes topics concerned with the molecular basis of life and selected physiological systems of the human body. The course will investigate: genes to proteins, the regulation of gene expression, genetics of viruses and an introduction to biotechnology. Selected physiological systems of the human body will be addressed such as human nutrition, circulation, and gas exchange, and immune system.

Text Book

Title	Biology
Author(s)	Campell NA, Urry LA, Cain ML, Wasserman SA, Minorsky PV and Reece JB
Edition	10th Edition
Short Name	Ref # 1
Other Information	11th Edition 2018 is available

Course References

Instructor

Name	Prof. Fouad Almomani
Office Location	PH1L1
Office Hours	Sun : 11:00 - 12:00 Mon : 11:00 - 12:30 Tue : 11:00 - 12:00 Wed : 12:00 - 13:30 Thu : 11:00 - 12:00
Email	fouad57@just.edu.jo

Class Schedule & Room

Section 1:

Lecture Time: Sun, Tue, Thu : 12:30 - 13:30

Room: NF39

Tentative List of Topics Covered

Weeks	Topic	References
Weeks 1, 2	Gene Expression: From Gene to Protein	Chapter 17 From Ref # 1
Weeks 3, 4	Control of Gene Expression	Chapter 18 From Ref # 1
Weeks 5, 6	DNA Technology	Chapter 19 From Ref # 1
Weeks 7, 8	The Evolution of Genomes	Chapter 21 From Ref # 1
Week 9	Microevolution	Chapter 23 From Ref # 1
Week 10	Introduction to Viruses	Chapter 26 From Ref # 1
Week 11	Prokaryotes	Chapter 27 From Ref # 1
Week 12	Plant Structure and Growth	Chapter 35 From Ref # 1
Week 13	Animal Defenses Against Infection	Chapter 47 From Ref # 1
Week 14	An Overview of Ecology	Chapter 51 From Ref # 1

Mapping of Course Objectives to Program Student Outcomes¹

Assessment method

Describe the process of gene expression and how this process is regulated at the molecular level in prokaryotes and eukaryotes [1A]	
Be familiar with the current techniques used in recombinant DNA technology and the various applications of biotechnology [1C]	
Be familiar with genomes, how they evolved, how to use bioinformatics to study them and how genetic variation makes evolution possible [1A]	
Become familiar with the viruses and bacteria and their importance in biotechnology [1A]	
Describe the basic principles of immunology including innate immunity, adaptive immunity, organs and tissues of immune system [1A]	
Be familiar with plant structure and growth, different types of biomes that constitutes the earth [1A]	

Relationship to Program Student Outcomes (Out of 100%)

A	B	C	D	E	F
75		25			

Policy	
Class Attendance	Your class attendance is mandatory. Absences in excess of 20% of the total lecture hours will result in your being dropped from the course with a failing grade
Makeup Exams	Make-up exam appeals should be filed within one week of the missed exam
Cell Phones	Cell phones are prohibited during examinations and must be turned off during lecture. No incoming or outgoing calls or text messages are allowed
Cell Phones	Cell phones are completely prohibited during examinations according to the university regulations i.e. you are not allowed to bring your phone into the exam hall
Cheating	Unethical conduct, including cheating during examinations, will result in punishment by the university administration

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