



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

BIO107 General Biology (Practical)

First Semester 2017-2018

Course Catalog

1 Credit Hours. This laboratory course reinforces the understanding of cellular, molecular and genetic processes learned in General Biology I and II lectures. Exercises include the use of microscope in examination of cells and tissues, biochemical analysis of enzyme activity, osmosis, cellular respiration, genetic investigation as well as examining plant and animal tissues and human systems.

Text Book

Title	Manual of General Biology, 2016/2017
Author(s)	Department of Applied Biology
Edition	10th Edition
Short Name	Ref # 1
Other Information	

Course References

Short name	Book name	Author(s)	Edition	Other Information
Ref # 2	Biology	Campbell et al	10th Edition	

Instructor

Name	Dr. Laith Al-Eitan
Office Location	-
Office Hours	Sun : 08:30 - 10:30 Mon : 10:00 - 11:30 Tue : 10:30 - 11:30 Wed : 11:00 - 13:30
Email	lneitan@just.edu.jo

Class Schedule & Room

Section 1:

Lecture Time: Sun : 10:30 - 12:30

Room: LAB 1 (PH1 L0)

Tentative List of Topics Covered

Weeks	Topic	References
Week 1	Lab Safety, Scientific Writing, and Microscopy	Pages 7-24 From Ref # 1
Week 2	Cell Structure and Function	Pages 25-31 From Ref # 1
Week 3	Macromolecules and Living Things	Pages 32-41 From Ref # 1
Week 4	Enzyme Activity	Pages 42-48 From Ref # 1
Week 5	Cellular Respiration and Fermentation	Pages 46-50 From Ref # 1
Week 6	Diffusion and Osmosis	Pages 55-61 From Ref # 1
Week 7	Midterm Exam	
Week 8	Human Genetics	Pages 65-73 From Ref # 1
Week 9	Mitosis and Meiosis	Pages 83-104 From Ref # 1
Week 10	Plant Tissues and Organs	
Week 11	Animal Tissues	Pages 105-118 From Ref # 1
Week 12	Histology of Human organs	119-133 From Ref # 1
Week 13	Human Systems	Pages 134-151 From Ref # 1
Week 14	Final exam	

Mapping of Course Objectives to Program Student Outcomes¹	Assessment method
Use instruments such as microscopes to study cell structure and function and various laboratory techniques to study molecules of living things such as enzymes, carbohydrates, lipids and nucleic acids. [1B]	
Explain the basic concepts in biology, including the chemical basis of life, structure of cells and how they produce and use energy, how they reproduce, and how inheritance works [1A]	
Understand plant tissue structure and function [1B]	
Understand animal structure and function with comparison to human body and emphasis on major physiological systems such as digestive, respiratory, circulatory, and reproductive and nervous systems [1B]	

Relationship to Program Student Outcomes (Out of 100%)

A	B	C	D	E	F
25	75				

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 completely prohibited during examinations according to the university regulations i.e. you are not allowed to bring your phone into the exam hall
Cell Phones	Cell phones must be turned off during lectures. No incoming or outgoing calls or text messages are allowed
Cheating	Unethical conduct, including cheating during examinations, will result in punishment by the university administration

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