Jordan University of Science and Technology

Faculty of Science & Arts

Biotechnology & Genetic Engineering Department

BT108 General Biology (Practical) - JNQF Level: 6

First Semester 2023-2024

Course Catalog
1 Credit Hours. The laboratory is dedicated to investigating various aspects encompassing the utilization of microscopes, diverse cell types, macromolecules, respiratory processes, mitosis and meiosis, plant anatomy, and the comprehensive study of human anatomy, spanning from cellular structures to systemic functions. It offers an extensive array of laboratory experiences tailored for students specializing in nursing, physical and occupational therapy, pharmacology, agriculture, and health sciences, as well as those enrolled in biology and medical programs.

Text Book	
Title	Manual of General Biology
Author(s)	Department of Applied Biology & Biotechnology and Genetic Engineering
Edition	1st Edition
Short Name	General Biology
Other Information	

Instructor	
Name	**Miss REHAN BANI_HANI**
Office Location	-
Office Hours	
Email	rtbanihani8@just.edu.jo

Instructor	
Name	**Mr. Saif Alahmad**
Office Location	-

Office Hours	Sun : 08:30 - 10:30 Mon : 11:30 - 13:30 Tue : 14:30 - 16:30 Thu : 08:30 - 10:30 Thu : 12:30 - 14:30 Thu : 14:30 - 16:30
Email	szalahmad7@just.edu.jo

Class Schedule & Room

Section 1:
Lecture Time: Sun : 10:30 - 12:30
Room: LAB 1 (PH1 L0)

Section 2:
Lecture Time: Sun : 10:30 - 12:30
Room: LAB

Section 3:
Lecture Time: Sun : 12:30 - 14:30
Room: LAB 1 (PH1 L0)

Section 4:
Lecture Time: Sun : 12:30 - 14:30
Room: LAB

Section 5:
Lecture Time: Sun : 14:30 - 16:30
Room: LAB

Section 6:
Lecture Time: Sun : 14:30 - 16:30
Room: LAB

Section 7:
Lecture Time: Mon : 08:30 - 10:30
Room: LAB

Section 9:
Lecture Time: Mon : 10:30 - 12:30
Room: LAB 2 (PH1 L0)

Section 10:
Lecture Time: Mon : 10:30 - 12:30
Room: LAB 1 (PH1 L0)

Section 11:
Lecture Time: Mon : 12:30 - 14:30
Room: LAB

Section 12:
Lecture Time: Mon : 12:30 - 14:30
Room: LAB 1 (PH1 L0)

Section 13:
Lecture Time: Mon : 14:30 - 16:30
Room: LAB

Section 14:
Lecture Time: Mon : 14:30 - 16:30
Room: LAB

Section 15:
Lecture Time: Thu : 08:30 - 10:30
Room: LAB

Section 16:
Lecture Time: Thu : 08:30 - 10:30
Room: LAB

Section 17:
Lecture Time: Tue : 08:30 - 10:30
Room: LAB 2 (PH1 L0)

Section 18:
Lecture Time: Tue : 08:30 - 10:30
Room: LAB

Section 19:
Lecture Time: Tue : 10:30 - 12:30
Room: LAB

Section 20:
Lecture Time: Tue : 10:30 - 12:30
Room: LAB

Section 21:
Lecture Time: Thu : 10:30 - 12:30
Room: LAB 2 (PH1 L0)

Section 22:
Lecture Time: Thu : 10:30 - 12:30
Room: LAB 1 (PH1 L0)

Section 23:
Lecture Time: Tue : 12:30 - 14:30
Room: LAB 1 (PH1 L0)

Section 24:
Lecture Time: Tue : 12:30 - 14:30
Room: LAB

Section 25:
Lecture Time: Thu : 12:30 - 14:30
Room: LAB 2 (PH1 L0)

Section 26:
Lecture Time: Tue : 14:30 - 16:30
Room: LAB

Section 27:
Lecture Time: Tue : 14:30 - 16:30
Room: LAB

Section 28:
Lecture Time: Thu : 14:30 - 16:30
Room: LAB

Section 29:
Lecture Time: Thu : 14:30 - 16:30
Room: LAB 2 (PH1 L0)

Section 30:
Lecture Time: Wed : 08:30 - 10:30
Room: LAB

Section 34:
Lecture Time: Wed : 10:30 - 12:30
Room: LAB 1 (PH1 L0)

Section 35:
Lecture Time: Wed : 10:30 - 12:30
Room: LAB

Section 36:
Lecture Time: Thu : 12:30 - 14:30
Room: LAB

Section 37:
Lecture Time: Wed : 12:30 - 14:30
Room: LAB 1 (PH1 L0)

Section 38:
Lecture Time: Wed : 12:30 - 14:30
Room: LAB 2 (PH1 L0)

Section 39:
Lecture Time: Wed : 14:30 - 16:30
Room: LAB

Section 40:
Lecture Time: Wed : 14:30 - 16:30
Room: LAB

Tentative List of Topics Covered		
Weeks	**Topic**	**References**
Weeks 1, 2	Lab Safety and the Microscopes	From **General Biology**
Week 3	Cell Structure and Function	From **General Biology**
Week 4	Macromolecules and Living Things	From **General Biology**
Week 5	Enzyme Activity	From **General Biology**
Week 6	Cellular respiration and Fermentation	From **General Biology**

Week 7	Diffusion and Osmosis	From **General Biology**
Week 8	Mitosis and Meiosis	From **General Biology**
Week 9	Human Genetics	From **General Biology**
Week 10	Animal Tissues	From **General Biology**
Week 11	Histology of Human Organs	From **General Biology**
Week 12	Human Systems	From **General Biology**

Mapping of Course Outcomes to Program Outcomes and NQF Outcomes	**Course Outcome Weight (Out of 100%)**	**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. [1SLO1, 1SLO2] [1L6S1]	30%	
Explain the basic concepts in biology, including the chemical basis of life, the structure of cells and how they produce and use energy, how they reproduce, and how inheritance works. [1SLO1, 1SLO2] [1L6S1, 1L6S2]	15%	
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. [1SLO3, 1SLO4, 1SLO5] [1L6S1, 1L6S2, 1L6S3]	40%	

Relationship to Program Student Outcomes (Out of 100%)					
SLO1	SLO2	SLO3	SLO4	SLO5	SLO6
22.5	22.5	13.33	13.33	13.33	

Relationship to NQF Outcomes (Out of 100%)		
L6S1	L6S2	L6S3
50.83	20.83	13.33

Evaluation	
Assessment Tool	**Weight**
Midterm Exam	30%
Practical and Quizzes	30%
Final Exam	40%

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