



**Jordan University of Science and Technology**  
**Faculty of Science & Arts**  
**Biotechnology & Genetic Engineering Department**

BT107 General Biology Laboratory - JNQF Level: 6

First Semester 2023-2024

**Course Catalog**

1 Credit Hours. This course is designed to introduce students to the basic concept of biology as a discipline. An overview of the microscope, different cell types, essential molecules, cell divisions, anatomy of the plant and human body with a wide range of laboratory experiments related to these topics where students are required to experience their ability in doing experiments, synthesize results and draw conclusions from their own work.

**Text Book**

<b>Title</b>	Manual of General Biology
<b>Author(s)</b>	Department of Biotechnology and Genetics Engineering
<b>Edition</b>	2nd Edition
<b>Short Name</b>	Main Reference
<b>Other Information</b>	

**Instructor**

<b>Name</b>	<b>Mr. Erwah Al Bataineh</b>
<b>Office Location</b>	-
<b>Office Hours</b>	Sun : 08:30 - 10:30 Tue : 14:30 - 15:30 Wed : 10:30 - 12:30 Thu : 12:30 - 13:30
<b>Email</b>	eaalbataineh1@just.edu.jo

**Instructor**

<b>Name</b>	<b>Miss Adan Alnaamneh</b>
<b>Office Location</b>	-

Office Hours	Sun : 08:00 - 08:30 Sun : 14:30 - 16:30 Mon : 08:00 - 08:30 Mon : 14:30 - 16:00 Tue : 08:00 - 08:30 Wed : 08:00 - 08:30 Wed : 08:30 - 10:30 Wed : 10:30 - 12:30 Thu : 12:30 - 14:30
Email	ahalnaamneh2@just.edu.jo

Instructor	
Name	<b>Mr. Saif Alahmad</b>
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 3 (PH1 L0)	
Section 2: Lecture Time: Sun : 10:30 - 12:30 Room: LAB	
Section 3: Lecture Time: Sun : 12:30 - 14:30 Room: LAB	
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 8:

Lecture Time: Mon : 08:30 - 10:30

Room: LAB

Section 9:

Lecture Time: Mon : 10:30 - 12:30

Room: LAB

Section 10:

Lecture Time: Mon : 10:30 - 12:30

Room: LAB

Section 11:

Lecture Time: Mon : 12:30 - 14:30

Room: LAB

Section 12:

Lecture Time: Mon : 12:30 - 14:30

Room: LAB

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: Tue : 08:30 - 10:30

Room: LAB

Section 16:

Lecture Time: Tue : 08:30 - 10:30

Room: LAB

Section 17:

Lecture Time: Tue : 10:30 - 12:30

Room: LAB

Section 18:

Lecture Time: Tue : 10:30 - 12:30

Room: LAB

Section 19:

Lecture Time: Tue : 12:30 - 14:30

Room: LAB

Section 20:

Lecture Time: Tue : 12:30 - 14:30

Room: LAB

Prerequisites		
Line Number	Course Name	Prerequisite Type
961020	BT102 General Biology (2)	Pre./Con.

Tentative List of Topics Covered		
Weeks	Topic	References
Week 1	Laboratory Safety, Regulations and Microscopy	From <b>Main Reference</b>
Week 2	The Cell Structure and Function	From <b>Main Reference</b>
Week 3	Macromolecules and Living Things	From <b>Main Reference</b>
Week 4	Enzyme Activity	From <b>Main Reference</b>
Week 5	Cellular Respiration and Fermentation	From <b>Main Reference</b>
Week 6	Diffusion and Osmosis	From <b>Main Reference</b>
Week 7	Mitosis and Meiosis	From <b>Main Reference</b>
Week 8	Human Genetics	From <b>Main Reference</b>
Week 9	Plant tissues and organs	From <b>Main Reference</b>
Week 10	Animal Tissues	From <b>Main Reference</b>
Week 11	Histology of Human Organs	From <b>Main Reference</b>
Week 12	Human Systems	From <b>Main Reference</b>

Mapping of Course Outcomes to Program Outcomes and NQF Outcomes	Course Outcome Weight (Out of 100%)	Assessment method
Discuss the main concepts of biology. [10L6K1]	10%	
Describe the structural and functional properties of different cell types among living organisms. [10L6K2]	10%	
Explore many biological activities within living organisms such as, respiration, enzymatic reactions, molecules transporting and cell division with the concepts of genetics and inheritance. [30L6K2]	30%	
Examine representative models and slides. [10L6K2]	10%	
Perform experiments; dealing with laboratory materials, tools and instruments. [30L6S1]	30%	
Ability to analyze and solve practical problems. [5L6S2]	5%	
Ability to organize group work, implement team and communication skills. [5L6S3]	5%	

Relationship to Program Student Outcomes (Out of 100%)					
A	B	C	D	E	F

Relationship to NQF Outcomes (Out of 100%)				
L6K1	L6K2	L6S1	L6S2	L6S3
10	50	30	5	5

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