



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

BT101 General Biology (1)

First Semester 2023-2024

Course Catalog

3 Credit Hours. General Biology 101 is dedicated to the study of the molecular and cellular basis of life. Topics include cell structure and physiology, information flow, metabolism, cellular reproduction, Mendelian and modern genetics. This course is designed for students planning to major in biotechnology, genetics or a related discipline.

Text Book

Title	Biology: A global Approach
Author(s)	Campell, Urry, Cain, Wasserman, Minorsky, Reece.
Edition	11th Edition
Short Name	Ref # 1
Other Information	

Instructor

Name	Dr. Nisreen Al-Quraan
Office Location	PH1-L0
Office Hours	Sun : 09:30 - 11:30 Mon : 11:30 - 12:30 Tue : 10:30 - 11:30 Wed : 11:30 - 12:30 Thu : 10:00 - 11:00
Email	naquraan@just.edu.jo

Class Schedule & Room

Section 1:

Lecture Time: Sun, Tue, Thu : 11:30 - 12:30

Room: SB19

Tentative List of Topics Covered

Weeks	Topic	References
Weeks 1, 2	Biological Macromolecules and Lipids	Chapter 5 (114-139) From Ref # 1
Weeks 3, 4	Cell Structure and Function	Chapter 7 (163-195) From Ref # 1
Week 5	Cell Membranes	Chapter 8 (196-212) From Ref # 1
Week 6	Cell Respiration	Chapter 10 (236-258) From Ref # 1
Week 7	Mitosis	Chapter 12 (284-302) From Ref # 1
Week 8	Sexual Life Cycle and Meiosis	Chapter 13 (304-318) From Ref # 1
Week 9	Mendelian Genetics	Chapter 14 (319-343) From Ref # 1
Weeks 10, 11	Linkage and Chromosomes	Chapter 15 (344-363) From Ref # 1
Week 12	Nucleic Acids and Inheritance	Chapter 16 (364-384) From Ref # 1
Weeks 13, 14	Animal Defenses Against Infection	Chapter 47 (1100-1118) From Ref # 1

Mapping of Course Outcomes to Program Outcomes	Course Outcome Weight (Out of 100%)	Assessment method
Describe the basic properties of the major classes of biological molecules needed for life [1A]	15%	Midterm
Compare and contrast the structures, reproduction, and subcellular characteristics of prokaryotic and eukaryotic cells [1A]	15%	Midterm
Describe the structure of cell membranes and the movement of molecules across a membrane [1A]	10%	Midterm
Describe and explain the principles of Bioenergetics [1A]	10%	Midterm, Quizzes
Describe the importance of cell division in maintaining the continuity of life [1A]	20%	Quizzes, Final Exam
Define and apply the principles of Mendelian genetics and its modern extensions to the unity and diversity of life [1A, 1D]	10%	Final Exam
Understand the molecular, structural and chromosomal basis of heredity. [1A]	10%	Final Exam
Under standing the structure and function of the mammalian immune system [1A]	10%	Final Exam

Relationship to Program Student Outcomes (Out of 100%)					
A	B	C	D	E	F
95			5		

Evaluation	
Assessment Tool	Weight
Midterm	45%
Quizzes	15%
Final Exam	40%

Policy	
Quizzes	The instructor has the discretion to have announced and/or unannounced quizzes. Failure to take a quiz will result in a grade of zero for that quiz
Regrades	If you have questions concerning the grading of your exam and quizzes, you have only ONE week after the date the exam or quiz was made available to you. After one week, all scores are final.
Course Web Site	e-learning will be used to post general information about the course, as well as distribute lecture slides and any additional material. Please check the course site frequently for updates to the course information and syllabus.
Attendance policy	It's your responsibility to attend lectures and exams. It's to your advantage to attend lectures, as most of the exam material will be covered during lecture.

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