



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

BT232 Basic Biotechnology

First Semester 2021-2022

Course Catalog

2 Credit Hours. This class discusses the fundamental aspects of biotechnology and its importance to mankind in a concise and lucid explanation of this newly founded science. The course emphasizes how cell structure and function is a vital starting point for knowledge of genetic engineering and gene technology. Lectures will underlie the principles and application of Recombinant DNA technology in industrial, animal, agricultural, pharmaceutical, and biomedical fields

Text Book

Title	Introduction to Biotechnology,
Author(s)	William J. Thieman and Michael A. Palladino
Edition	3rd Edition
Short Name	Ref # 1
Other Information	

Course References

Short name	Book name	Author(s)	Edition	Other Information
Ref # 2	Biotechnology: An Introduction	Susan R. Barnum	2nd Edition	

Instructor

Name	Dr. Qutaiba Ababneh
Office Location	PH1L1
Office Hours	Sun : 10:00 - 12:00 Mon : 14:00 - 15:00 Tue : 10:00 - 13:00 Wed : 14:00 - 14:15
Email	qoababneh@just.edu.jo

Class Schedule & Room

Section 1:

Lecture Time: Mon : 11:30 - 12:30

Room: LAB

Section 2:

Lecture Time: Wed : 11:30 - 12:30

Room: LAB

Tentative List of Topics Covered

Weeks	Topic	References
Week 1	Biotechnology old and new	
Week 2	DNA replication	
Weeks 3, 4	From DNA to protein	
Weeks 5, 6	Basic principles of Recombinant DNA Technology	
Weeks 7, 8	Basic principle of immunology	
Week 9	Microbial Biotechnology	
Week 10	Plant Biotechnology	
Week 11	Animal Biotechnology	
Weeks 12, 13, 14	Medical Biotechnology and Immunology	

Mapping of Course Outcomes to Program Student Outcomes	Course Outcome Weight (Out of 100%)	Assessment method
Describe biotechnology as an industry and business [1A]	15%	
Describe methods of recombinant DNA technology [1A]	25%	
Analyze and solve problems related to recombinant DNA technology [1D]	10%	
Describe the drug development process [1A]	10%	
Describe specific examples of biotechnology used in medical, forensic, food, and industrial applications [1C]	35%	
Debate the ethical implications of biotechnology [1E]	5%	

Relationship to Program Student Outcomes (Out of 100%)

A	B	C	D	E	F
50		35	10	5	

Evaluation

Assessment Tool	Weight

Midterm Exam	40%
Quizzes	20%
Final Exam	40%

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
cheating	Unethical conduct, including cheating during examinations, will result in punishment by the university administration

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