



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

BT492A Selected Topics In Biotechnology (A) - JNQF Level: 6

First Semester 2023-2024

Course Catalog

3 Credit Hours. This course is based on selected topics in Scientific Inquiry, Science Ethics and Up-to-date Plant Biotechnology techniques used in agriculture.

Text Book

Title	Based on Topics
Author(s)	NA
Edition	1st Edition
Short Name	Articles and Powerpoints Slides
Other Information	

Instructor

Name	Prof. Rami Alkhatib
Office Location	PH1-L1
Office Hours	Sun : 10:30 - 11:30 Sun : 13:30 - 14:30 Mon : 10:00 - 11:00 Tue : 10:30 - 11:30 Tue : 13:30 - 14:30 Thu : 10:30 - 11:30
Email	rqalkhatib@just.edu.jo

Class Schedule & Room

Section 1:

Lecture Time: Sun, Tue : 09:30 - 10:30

Room: NF45

Tentative List of Topics Covered

Weeks	Topic	References
Week 1	Introduction to Scientific Inquiry	
Week 2	Scientific Methods	
Week 3	Types of Research	
Week 4	Experimental Design	
Week 5	Introduction to Ethics in Science	
Week 6	Introduction to Human Ethics in Research	
Week 7	Principles of Human Ethics	
Week 8	Motivation in Science	
Week 9	Leadership in Science	
Week 10	Introduction in Plant Biotechnology	
Week 11	Magnetized Water	
Week 12	Magnetized Water Applications	
Week 13	Introduction to Nanotechnology	
Week 14	Applications of Nanotechnology in Science	
Week 15	Applications of Nanotechnology in Plant Sciences	
Week 16	Articles in Plant Nanotechnology	

Mapping of Course Outcomes to Program Outcomes and NQF Outcomes	Course Outcome Weight (Out of 100%)	Assessment method
Describe basic topics in biotechnology and science [1SLO1, 1SLO2] [1L6S2]	25%	Midterm exam, Final exam
Describe the structure and the nature of the scientific method [1SLO1, 1SLO3, 1SLO5] [1L6K1, 1L6C4]	25%	Midterm exam, Final exam
Define Ethics in science [1SLO3, 1SLO5, 1SLO6] [1L6K1, 1L6C5]	25%	Midterm exam, Final exam
Describe the non-traditional techniques in plant biotechnology [1SLO3, 1SLO4, 1SLO6] [1L6K2, 1L6C4]	25%	Midterm exam, Final exam

Relationship to Program Student Outcomes (Out of 100%)					
SLO1	SLO2	SLO3	SLO4	SLO5	SLO6
20.83	12.5	25	8.33	16.67	16.67

Relationship to NQF Outcomes (Out of 100%)				
L6K1	L6K2	L6S2	L6C4	L6C5
25	12.5	25	25	12.5

Evaluation	
Assessment Tool	Weight
Midterm exam	50%
Final exam	50%

Policy	
Course Policy and Attendance	<p>Attendance:</p> <p>Students are expected to attend classes. Consequently, students are responsible for ALL material presented or assigned during the scheduled class period and are expected to obtain such information on their own should a class period be missed. Whenever possible, absences will be discussed with the instructor in advance. Class attendance will be taken in lecture. Students will be allowed two absences before the final. Absences in excess of that stated above will result in the student failing in the course.</p> <p>Policy on academic dishonesty and Make-up examinations: JUST regulations and rules will be strictly implemented. Refer to University's student information book for more details about exams, exam make up and absence rules; If you are absent from one or more of your examinations for medical or other reasons, you must provide documentary evidence to justify your absence for the consideration of a make up exam within one week or else no make up exam will be permitted.</p>

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