



Jordan University of Science and Technology
Faculty of Agriculture
Plant Production Department

PP203 Plant Science Laboratory (For Plant Production Major)

First Semester 2020-2021

Course Catalog

1 Credit Hours. This course is designed to provide students with a working knowledge of the fundamental structures and processes of plants. Principles to be applied cover cytology, plant organs and their structures, morphology, and systematics.

Text Book

Title	Manual of plant science laboratory
Author(s)	Mohammad Al-Gharaibeh
Edition	1st Edition
Short Name	Ref #1
Other Information	

Course References

Short name	Book name	Author(s)	Edition	Other Information
Ref #2	Plant Biology	Linda E. Graham, James M. Graham, and Lee W. Wilcox	2nd Edition	Pearson, Prentice Hall

Instructor

Name	Dr. Mohammad Al-Gharaibeh
Office Location	M1L2
Office Hours	
Email	mfagharaibeh@just.edu.jo

Class Schedule & Room

Section 1:
Lecture Time: Wed : 13:30 - 16:30
Room: LAB

Section 2:
Lecture Time: Thu : 08:15 - 11:15
Room: LAB

Teaching Assistant

(Sections 1, 2)

Prerequisites

Line Number	Course Name	Prerequisite Type
622021	PP202 Principles Of Plant Science	Pre./Con.

Tentative List of Topics Covered

Weeks	Topic	References
Week 1	Lab Safety and Microscopes	From Ref #1
Week 2	Cell Structure and Function/ Plastids	From Ref #1, Chapt 4 From Ref #2
Week 3	Cell Structure and Function/ Vacuoles	From Ref #1, Chapt 4 From Ref #2
Week 4	Cell Structure and Function/ Cell Wall	From Ref #1, Chapt 4 & 7 From Ref #2
Week 5	Plant Tissues	From Ref #1, Chapt 8 From Ref #2
Week 6	Plant Organs / Roots, Stems and Leaves	From Ref #1, Chapt 9, 10 & 11 From Ref #2
Week 7	Plant Organs / Flowers and Fruits	From Ref #1, Chapt 8 From Ref #2
Week 8	Hypothesis Based Experiment	From Ref #1

Mapping of Course Outcomes to Program Student Outcomes	Course Outcome Weight (Out of 100%)	Assessment method
Discuss the main concepts of plant biology. [10PLO2]	10%	Mid-term exam
Describe the structural and functional properties of many organelles in different plant cell types. [5PLO1, 15PLO2]	20%	Mid-term exam

Describe the structure and function of different plant tissues in each organ (stem, root and leaf). [5PLO1, 10PLO2, 5PLO3]	20%	Mid-term exam
Describe the biological and morphological features to differentiate monocots from dicots plants [10PLO2]	10%	Mid-term exam
Explore and classify different types of leaves, fruits, stems and flowers and their modifications [5PLO1, 5PLO2, 10PLO3]	20%	Lab Reports
Learn terminology and phytophraphy used in scientific communications in plant biology and taxonomy. [5PLO2]	5%	Lab Reports
Perform experiments; dealing with laboratory materials, tools and instruments. [5PLO1, 5PLO3]	10%	Lab Reports
Ability to analyze and solve practical problems. [5PLO1]	5%	Lab Reports

Relationship to Program Student Outcomes (Out of 100%)						
PLO1	PLO2	PLO3	PLO4	PLO5	PLO6	PLO7
25	55	20				

Evaluation	
Assessment Tool	Weight
Mid-term exam	40%
Lab Reports	10%
Quizzes	10%
Final exam	40%

Policy	
Exams	All exams are closed book and notes. The final exam is comprehensive (covers all the material) and includes both paper and living specimens based questions. Incomplete exams need approval from the department chair
Cheating	Prohibited and in case of cheating the student will be subject to punishment according to the university regulations
Attendance	Up to 20% in accordance with university policy
Participation	Participation is highly encouraged
Withdraw	According to the timeline defined by the university regulations

Date Printed: 2020-11-26