



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

PP311 Field Crops Production

First Semester 2020-2021

Course Catalog

3 Credit Hours. Human population and food demand, crop classification, crop morphology, environment requirements for crop growth and development, cultural practices, production management of the five major crops in Jordan (wheat, barley, maize, sorghum, chickpea, lentil, and fababean), and crop rotation.

Text Book

Title	Crop Science Principles and Practice.
Author(s)	Mullen R
Edition	2nd Edition
Short Name	Ref # 1
Other Information	Burgess International Group Inc.

Course References

Short name	Book name	Author(s)	Edition	Other Information
Ref # 2	Crop Production Principles and Practices.	Chapman S. R. L. Carter 1976	1st Edition	W. H. Freeman and Company, San Francisco.
Ref # 3	Growths and Mineral Nutrition of Field Crops	Fageria, N. K., V. C. Ballgar, and C. A. Jones. 1991	1st Edition	Marcel Dekker, Inc., New York.
Ref # 4	Maximizing Crop Yields	Fageria, N. 1992.	2nd Edition	National Rice and Bean Research Centre Empreasa, Brazil. Marcel Dekker, New York.
Ref # 5	Grain Crops and Production Management	4) George R. L. Gibson 2000.	1st Edition	Iowa State University.

Ref # 6	Understanding Crop Production	Stroskopf N. C. 1981.	1st Edition	Reston Publishing Company, Virginia.
Ref # 7	Lentils	6) Webb, C. and G. Hawtin. 1980	1st Edition	International Centre for Agricultural Research in the Dry Areas. Common Wealth Agriculture Bureaux, England.

Instructor	
Name	Prof. Nezar Samarah
Office Location	C4L2
Office Hours	
Email	nsamarah@just.edu.jo

Class Schedule & Room
Section 1: Lecture Time: Sun, Tue : 12:30 - 13:30 Room: منصة الكترونية

Teaching Assistant
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Prerequisites		
Line Number	Course Name	Prerequisite Type
622030	PP203 Plant Science Laboratory (For Plant Production Major)	Prerequisite / Pass
622021	PP202 Principles Of Plant Science	Prerequisite / Pass

Tentative List of Topics Covered		
Weeks	Topic	References
Week 1	World population and food supply	From Ref #4
Week 2	Crop classification	From Ref #1
Week 3	Morphology of cereal and legume crops	From Ref #1
Week 4	Factors affecting crop growth and development	From Ref #1, From Ref #2

Weeks 6, 7	Wheat Production: Botanical description, climate and soil requirements, nutrient requirements, yield and yield components.	From Ref # 1, From Ref # 2, From Ref #4
Week 8	Barley Production: Botanical description, climate and soil requirements, nutrient requirements, yield and yield components.	From Ref # 1, From Ref # 2, From Ref #4
Week 9	Corn Production: Botanical description, climate and soil requirements, nutrient requirements, yield and yield components.	From Ref # 1, From Ref # 2, From Ref #4
Week 10	Sorghum Production: Botanical description, climate and soil requirements, nutrient requirements, yield and yield components.	From Ref # 1, From Ref # 2, From Ref #4
Week 11	Lentil Production: Botanical description, climate and soil requirements, nutrient requirements, yield and yield components.	From Ref # 6
Week 12	Chickpea Production: Botanical description, climate and soil requirements, nutrient requirements, yield and yield components.	From Ref # 1
Weeks 13, 14	Fababean Production: Botanical description, climate and soil requirements, nutrient requirements, yield and yield components.	From Ref # 1
Weeks 15, 16	Crop rotation: Definition and efficiency	From Ref # 1, From Ref # 2

Mapping of Course Outcomes to Program Student Outcomes	Course Outcome Weight (Out of 100%)	Assessment method
To understand the basic knowledge of crop classification, morphology, and identification of various field crops. [100PLO1]	10%	Mid-term Exam, Lab Reports, Quizzes, Final Lab Exam, Final Exam
To develop the basic knowledge of crop production and management. [30PLO1, 10PLO2, 60PLO4]	20%	Mid-term Exam, Lab Reports, Quizzes, Final Lab Exam, Final Exam

To learn about factors affecting crop growth and development. [30PLO1, 20PLO2, 30PLO4, 10PLO6, 10PLO7]	20%	Mid-term Exam, Lab Reports, Quizzes, Final Lab Exam, Final Exam
To relate among soil, seed, and plant sciences in managing crop production and optimizing yield of major field crops grown in Jordan. [50PLO1, 30PLO4, 10PLO6, 10PLO7]	40%	Mid-term Exam, Lab Reports, Quizzes, Assignment, Final Lab Exam, Final Exam
To learn about cropping systems used in Jordan [30PLO1, 30PLO4, 20PLO6, 20PLO7]	10%	Lab Reports, Quizzes, Final Lab Exam, Final Exam

Relationship to Program Student Outcomes (Out of 100%)						
PLO1	PLO2	PLO3	PLO4	PLO5	PLO6	PLO7
45	6		33		8	8

Evaluation	
Assessment Tool	Weight
Mid-term Exam	30%
Lab Reports	10%
Quizzes	5%
Assignment	5%
Final Lab Exam	10%
Final Exam	40%

Policy	
Exams	All exams are closed book and notes. The final exam is comprehensive (covering all teaching materials). Incomplete exams need approval from the department chair and the faculty dean.
Cheating	Prohibited; and in case of cheating the student will be subject to punishment in accordance with the university regulations
Attendance	Students are expected to attend all class meetings regularly. If the student is absent for more than 20% of the course, the student will be prevented from taking all subsequent exams and assigned an F (Failure) grade in the course (deprived by absence). This maximum includes both excused and unexcused absences.
Participation	Participation is highly encouraged
Laboratory	Students will take thirteen labs during the course. Students must submit lab reports and take final lab exam. Lab attendance is required for passing the class.
Withdraw	The student can withdraw from the course in accordance with the timeline defined by the university regulations