Jordan University of Science and Technology

Faculty of Agriculture

Plant Production Department

PP716 Advanced Forage Crops

Second Semester 2022-2023

Course Catalog
3 Credit Hours. Forage crop production, management, and utilization; crop identification; soil fertilization; planting and harvesting of grasses and legumes

Text Book	
Title	Forages: The Science of Grassland Agriculture
Author(s)	Kenneth J. Moore, Michael Collins, C. Jerry Nelson, Daren D. Redfearn.
Edition	1st Edition
Short Name	The Science of Grassland Agriculture
Other Information	First published:5 June 2020 Print ISBN:9781119436577 |Online ISBN:9781119436669 |DOI:10.1002/9781119436669 ? 2020 John Wiley & Sons Ltd

Course References

Short name	Book name	Author(s)	Edition	Other Information
Agronomy	A Text Book on Recent Advances in Agronomy.	Sunil Kumar; A K Tripathi; Dana Ram Palsaniya; P K Ghosh.	1st Edition	January 2022, Publisher: Kalyani ISBN: 978-93-5540-072-7
Major Forage Crops	Forage Crops of the World	Md. Hedayetullah, Parveen Zaman	1st Edition	Apple Academic Press. Pub Date: August 2018, Hard ISBN: 9781771886840 Paperback ISBN: 978-1-77463-169-0
Fodder	Agronomy of Fodder and Forage Crops	S. C. Panda	1st Edition	2014 Pages 392. Kalyani Publishers ISBN: 9327238176 9789327238174
Production Technology of Forage and Fodder Crops	Production Technology of Forage and Fodder Crops	R A Raju	1st Edition	Published by Agrobios Publication Date: 2018, 1st Edition ISBN 10: 819346737X / ISBN 13: 9788193467374

Instructor	
Name	**Prof. Munir Turk**
Office Location	C4L2
Office Hours	
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Class Schedule & Room
Section 1: Lecture Time: Sun, Tue, Thu : 12:30 - 13:30 Room: LAB

Tentative List of Topics Covered

Weeks	Topic	References
Week 1	Grassland Ecosystems and Their Improvement	**Chap.1** From **The Science of Grassland Agriculture**
Weeks 2, 3	Environmental and Physiological Aspect of Forage Management.	From **Agronomy**
Weeks 4, 5	Forage Harvesting & Storage: Hay Making and Silage	From **Agronomy**, From **Major Forage Crops**, From **Fodde**
Week 6	Soil Fertility and Fertilization of Forages	From **Agronomy**, From **Major Forage Crops**
Week 7	The Rhizobium-Legume Symbiosis, Infection Processes, mechanisms associated with the Fixation of Nitrogen in the Root Nodule	From **Agronomy**, From **Fodde**
Week 8	. Intercropping and Forage Mixtures Monoculture Vs. Mixture, Types, Advantages, Elements of choosing crops, Sowing of Mixture, Control of Mixtures	From **Agronomy**, From **Major Forage Crops**
Week 9	Annual Pasture to Replace Fallow Annual Medics or Ley Farming System	From **Production Technology of Forage and Fodder Crops**
Weeks 10, 11, 12, 13, 14	Alfalfa, Barley, Corn, Sorghum, Vetch and other forage crops	From **Agronomy**, From **Major Forage Crops**, From **Fodder**, From **Production Technology of Forage and Fodder Crops**

Mapping of Course Outcomes to Program Outcomes	Course Outcome Weight (Out of 100%)	Assessment method
Knowledge of plant science and crop production management	25%	First Exam, Second Exam, Final Exam

Concepts of plant biology, plant physiology, systematics, ecology, and genetics	25%	First Exam, Second Exam, Final Exam
Agricultural practices that lead to sustainable solutions	25%	First Exam, Second Exam, Final Exam
Characteristics of Forage Crops preservations for Ensiling and Hay making	25%	Final Exam

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

Evaluation	
Assessment Tool	**Weight**
First Exam	25%
Second Exam	25%
Final Exam	50%

Policy	
A student's participation	A student's participation in the work of a course is a precondition for receiving credit for the course. Students are expected to attend punctually all lectures and to participate in course assignments and activities as described in the course syllabus. Students registering late or who miss class are expected to make up all missed assignments in a manner determined by the instructor.

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