



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

AP333 Range Animal Nutrition

First Semester 2022-2023

Course Catalog

3 Credit Hours. Animal nutrition on rangeland, which includes nutrition, management, grazing systems and forage classifications. (Prerequisite: AP 232).

Text Book

Title	Applied Animal Nutrition
Author(s)	Peter R. Cheeke
Edition	3rd Edition
Short Name	APPANIMNUTR
Other Information	

Course References

Short name	Book name	Author(s)	Edition	Other Information
NUTR ECO RUM	Nutritional Ecology of the Ruminants	Peter J. Van Soest	2nd Edition	

Instructor

Name	Prof. Belal Obeidat
Office Location	M1L3
Office Hours	
Email	bobeidat@just.edu.jo

Class Schedule & Room

Section 1:

Lecture Time: Wed : 10:00 - 11:30

Room: C3014

Prerequisites

Line Number	Course Name	Prerequisite Type
612320	AP232 Feeds And Feeding	Prerequisite / Study

Tentative List of Topics Covered

Weeks	Topic	References
Weeks 1, 2	Introduction to the course and Range Terminology	From APPANIMNUTR , From NUTR ECO RUM
Weeks 2, 3	Forages and Nutritional Quality	From APPANIMNUTR , From NUTR ECO RUM
Weeks 4, 5	The Ruminant Animal and the Environment, Characteristics of the Rumen, Particle Size of Consumed Forages, Nutrient Requirements of Grazing Animals, Factors that Influences Forage Intake	From APPANIMNUTR , From NUTR ECO RUM
Week 6	Forage Intake by Grazing Animals, Control versus Influences, Single versus Multiple Controls over Intake, Short and long-term Controls over Intake	From APPANIMNUTR , From NUTR ECO RUM
Weeks 7, 8	Supplementation, Type of Supplementation, Guidelines for supplemental Feeding, Successful Supplementation Programs	From APPANIMNUTR , From NUTR ECO RUM
Weeks 9, 10	Nutritional Analysis of Forages Introduction Nutritive Evaluation of Forages Intake as a Component of Forage Quality	From APPANIMNUTR , From NUTR ECO RUM
Weeks 11, 12	Apparent Digestibility	From APPANIMNUTR , From NUTR ECO RUM

Week 13	Grazing Animal Behavior	From APPANIMNUTR, From NUTR ECO RUM
Week 14	Grazing Methods	From APPANIMNUTR, From NUTR ECO RUM

Mapping of Course Outcomes to Program Student Outcomes	Course Outcome Weight (Out of 100%)	Assessment method
Studying the application of animal nutrition and production principles to grazing situations [1SLO 1, 1SLO 2]	10%	
Knowing the interactions of herbivores and their environment as related to nutritive value and intake requirements of range herbivores [1SLO 2]	25%	
Understanding range animal nutrition and the forage/ruminant complex [1SLO 3, 1SLO 4]	25%	
Knowing forage, classifications, quality and characteristics [1SLO 3]	20%	
Knowing range animal nutrition techniques [1SLO 3]	5%	
Understanding basics of supplementation programs of range animals [1SLO 3, 1SLO 4]	10%	
Knowing grazing methods [1SLO 4]	5%	

Relationship to Program Student Outcomes (Out of 100%)			
SLO 1	SLO 2	SLO 3	SLO 4
5	30	42.5	22.5

Evaluation	
Assessment Tool	Weight
First Exam	30%
Final Exam	40%
Second Exam	30%

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