

Range Improvements (602474) (3 credit hr)

Department of Animal Production
School of Agriculture
The University of Jordan

Pre-requisite: MNR 272
2nd Semester 2020/2021
Time: 11-12:30 (M, W)

Course description

Selection of range improvements, restrictions on range improvements, planning range improvements, manipulation of range vegetation, revegetation of degraded rangelands, water- harvesting techniques, field assessment of range improvements.

Objectives

- To acquaint students with the basic principles of range improvements.
- To train students on planning of range improvements.
- To train students on participatory approach in dealing with pastoral communities.
- To train students on evaluation of range improvements.

Lecturer:

Professor Mahfouz "Mohammad Waheed" Abu-Zanat

Textbook

Range Development and Improvements, 3rd Edition, 1989, by J. Vallentine".

Week	Subject	Reference
1+2	Natural Rangelands (global scale) -Definition -Location -Importance (goods and Services) Natural Rangelands (Jordan) -Definition -Location -Importance (goods and Services)	
3	Characteristics of Rangelands -Physical -Biological -Socioeconomic	
4+5	Rangeland Degradation -Definition of degradation -Expression of degradation (rate, type...) -Drivers of degradation -Symptoms of degradation -Economic loss International Organizations Working on Rangeland Degradation (UNCCD, UNEP, FAO, ICARDA, GEF, IFAD...)	
6+7+8+9	Improvement of Rangelands -Definitions (rehabilitation, restoration, desertification...) Non-structural Improvement -Enforcement of laws -Amendments of acting laws Structural Improvement (SI) -Criteria of SI (physical, biological, economics) -Types of SI (revegetation, water harvesting, water spreading techniques, soil amendments...) Effect of Range Improvement on Wildlife	

10	Sustainable Improvement and Role of Local Community -Traditional institutions -Land tenure -Governance	
11+12+13	Evaluation of Improvement -Monitoring plan (parameters, measurement techniques) -Evaluation (meeting objectives or not) Valuation of Interventions	
14+15	Case Studies on Rangeland Improvement in Jordan (BRP)	

Course outcomes

At the end of this course, students are expected to be able to:

- To understand the basic principles of range improvements.
- To prepare a plan for range improvements.
- To practice the participatory approach in dealing with communities.
- To evaluate the implemented range improvements.

Exams and homeworks

Activity	Proportion	Time	Date
Exam 1	20%	13:00-14:30	Monday: 8 March 2021
Exam 2	20%	13:00-14:30	Monday: 5 April 2021
HWs (5x2)	10%		February: 22, March: 15, 29, April: 12, 21
Final Exam	50%	TBD	