

COURSE CURRICULUM

1. GENERAL INFORMATION

SCHOOL	ANIMAL BIOSCIENCES		
TEACHING DEPARTMENT	ANIMAL SCIENCE		
STUDY LEVEL	UNDERGRADUATE		
COURSE CODE	024	SEMESTER	3 rd
DEPARTMENT TO WHICH IS OFFERED:	Department of Animal Science (DAS)		
COURSE TITLE	GRAZING-LAND MANAGEMENT AND IMPROVEMENT		
INDEPENDENT TEACHING ACTIVITIES <i>In case ECTS are awarded for distinct parts of the course e.g. Theory Lectures, Laboratory Practicals etc. If ECTS are awarded uniformly for the entire course, give the weekly teaching hours and total ECTS.</i>		WEEKLY TEACHING HOURS	ECTS
Theory Lectures		3	3
Laboratory practicals		2	2
TOTAL		5	5
Add lines if necessary. Teaching and Learning methods should be described in detail in section 4.			
COURSE TYPE <i>Background, Basic knowledge, Field of Science, Skill development</i>	Field of Science		
PREREQUISITES	Botany		
LANGUAGE	Greek		
IS THE COURSE OFFERED to ERASMUS STUDENTS?	No		
COURSE WEB PAGE (URL)	Theory: https://oeclass.aua.gr/eclass/courses/EZPY126/ Practicals: https://oeclass.aua.gr/eclass/courses/EZPY126/		
INSTRUCTOR(S):	Theory: Hadjigeorgiou I. Practicals: Hadjigeorgiou I.		

2. LEARNING OUTCOMES

Learning outcomes

Describe the learning outcomes of the course, the specific knowledge, skills and competences of an appropriate level that students will acquire after successfully completing the course.

Refer to Appendix A.

- Description of the level of learning outcomes for each course of study in line with the European Higher Education Area Qualifications Framework
- Descriptive Indicators of Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning
- and Annex B
- Learning outcomes Writing Guide

The course "Grazing-land Management and Improvement" aims to provide students with theoretical and practical knowledge of modern concepts related to:

- a) ecology of grazed ecosystems,
- b) ecology of grazing,

- c) rational use of grazed ecosystems towards sustainability in animal production,
- d) improvement capacity of natural and semi-natural grazing-lands
- e) creation and utilization of sown swards.

Through this course the student will be able to :

- a) understand basic functions of the grazed ecosystems as well as how biotic and abiotic factors are involved
- b) understand capacity and limitations of different grazing land types towards ecosystem services
- c) understand grazing mechanics
- d) know basic tools utilized for grazing land and sown swards management
- e) know improvement methods for grazing lands and application criteria

The laboratory practicals aim to further strengthen the theoretical background and further assist students in understanding how grazed ecosystems are functioning and how we can match their sustainment with livestock production.

General competencies

Considering the general competencies that the graduate (as reported in the Diploma Supplement and listed below) must have acquired, describe in which one(s) the course is intended.

Search, analyze and synthesize data and information, using the necessary technologies
Adapt to new situations
Decision making
Autonomous work
Teamwork
Work in an international environment
Work in an interdisciplinary environment
Production of new research ideas

Project design and management
Respect for diversity and multiculturalism
Respect for the natural environment
Demonstration of social, professional, and moral responsibility and sensitivity to gender issues
Exercise of criticism and self-criticism
Promotion of free, creative, and inductive thinking

- Autonomous work
- Teamwork
- Decision making
- Work in a multidisciplinary environment
- Production of new research ideas
- Search, analysis and synthesis of data and information with the use and the required technologies

3. COURSE CONTENT

- Definitions and categories of grazing lands and sown swards
- Grazing lands ecology (environmental factors and vegetation)
- Grazing lands ecology (plant, soil, animal interactions)
- Vegetation and flora of grazing lands
- Forage plants and the creation of sown swards
- Grazing lands management

- Grazing lands improvement
- Grazing and ecosystem's services
- Animal production on grazing lands (constraints and opportunities)
- Legislation on grazing land management
- Current technology tools in grazing land management

4. TEACHING and LEARNING METHODS - EVALUATION

TEACHING METHOD <i>Face to face in classroom, Distance Learning, etc.</i>	In class, face to face and via specialized teaching platforms (e.g., Open e-Class, MS teams)	
USE OF INFORMATICS and COMMUNICATION TECHNOLOGIES <i>Use of ICT in Teaching, Laboratory Practicals, Communication with Students etc.</i>	PowerPoint and video presentations. Communication with students via e-mail. Teaching support through access to the e-class platform, to on-line databases and Specialized Software etc. References to selected scientific websites.	
TEACHING ORGANIZATION <i>Describe in detail the methods of teaching: Lectures, Seminars, Laboratory Practicals, Field Exercise, Study and Analysis of Bibliography, Tutorial, Practice (Placement), Clinical Exercise, Art Workshop, Interactive Teaching, Educational Visits, Project Work, Authoring, Artistic creation etc.</i> <i>The student's study hours for each learning activity and hours of non-guided study are indicated so that the total workload at the semester corresponds to the ECTS</i>	Activity	Work load (h) per semester
	Lectures in class	70
	Literature search, study, and analysis	20
	Laboratory - practicals	20
	Field trips	15
	Total workload (25 h workload per credit unit)	125
STUDENTS' EVALUATION <i>Description of the evaluation process</i> <i>Assessment Language, Assessment Methods, Formulation or Conclusion, Multiple Choice Test, Short Response Questions, Test Questions, Problem Solving, Written Work, Reporting, Oral Examination, Public Presentation, Laboratory Work, Clinical Patient Examination, Artistic Interpretation, Other</i> <i>Identify certain evaluation criteria and state if and where they are accessible by the students.</i>	Assignments Exams Marking Scale: 0-10 Minimum Passing Mark: 5 The students are being informed on the evaluation criteria during their first lesson of the semester. I. Theory Written final exam II. Laboratory Written final exam	

5. BIBLIOGRAPHY

Proposed Literature for theory:

(A) Printed Related scientific journals - Publications:

- J. Holechek, R.D. Pieper, C.H. Herbel. «Range Management: Principles and Practices», 6th Edition, Prentice Hall, 2011, ISBN-13: 978-0-13-501416-5
- Barnes, R., Nelson, C.J., Collins, M., Moore, K.J. "Forages: an Introduction to Grassland Agriculture" Volumes 1&2, Blackwell Publishing, ISBN 978-0-8138-0421-7
- Γ. Σαρχής. «Βελτίωση και Διαχείριση Φυσικών Βοσκοτόπων», Εκδόσεις Σταμούλη, 1998

- Α.Σ. Νάσσης, Κ.Ν. Τσιουβάρας, Ε.Μ. Αβράαμ, Ζ.Μ. Παρίση «Διαχείριση και βελτίωση λιβαδιών». Θεσσαλονίκη, University Studio Press, 2021

- Livestock Science

(B) Books

1. Γ. Σαρλής. «Βελτίωση και Διαχείριση Φυσικών Βοσκοτόπων», Εκδόσεις Σταμούλη, 1998
2. Α.Σ. Νάσσης, Κ.Ν. Τσιουβάρας, Ε.Μ. Αβράαμ, Ζ.Μ. Παρίση «Διαχείριση και βελτίωση λιβαδιών». Θεσσαλονίκη, University Studio Press, 2021

(C) Digital material

1. Power point presentations of all lectures uploaded in e-class platform
2. Practicals' notes prepared by Ι. Hadjigeorgiou available in e-class platform