COURSE OUTLINE

1.GENERAL

SCHOOL	AGRICULTURAL SCIENCES		
DEPARTMENT	FOOD SCIENCE AND TEChNOLOGY		
LEVEL OF COURSE	UNDERGRADUATE		
COURSE CODE	**FST_E09**	**SEMESTER OF STUDIES**	Spring Semester
COURSE TITLE	ANIMAL HUSBANDRY-NUTRITION OF FARM ANIMALS		

INDEPENDENT TEACHING ACTIVITIES *if credits are awarded for separate components of the course, e.g. lectures, laboratory exercises, etc. If the credits are awarded for the whole of the course, give the weekly teaching hours and the total credits*	**WEEKLY TEACHING HOURS**	**ECTS CREDITS**
Lectures	3	
Exercises	2	
Total	**5**	**5**
Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail at (d).		

COURSE TYPE *general background, special background, specialised general knowledge, skills development*	Elective Specialized general knowledge
PREREQUISITE COURSES:	There are no prerequisite courses
LANGUAGE OF INSTRUCTION and EXAMINATIONS:	Greek.
IS THE COURSE OFFERED TO ERASMUS STUDENTS	No
COURSE WEBPAGE (URL)	https://eclass.upatras.gr/

2.LEARNING OUTCOMES

Learning outcomes

The course learning outcomes, specific knowledge, skills and competences of an appropriate level, which the students will acquire with the successful completion of the course are described.

Consult Appendix A

- *Description of the level of learning outcomes for each qualifications cycle, according to the Qualifications Framework of the European Higher Education Area*
- *Descriptors for Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning and Appendix B*
- *Guidelines for writing Learning Outcomes*

Upon successful completion of the course students will be able to:

- Understand the general principles of breeding and exploitation of animals for the production of livestock products
- Recognize the contribution of livestock production to the global economy
- Recognize the value of livestock products in human nutrition
- Know the classification criteria in breeds of farm animals
- Apply their knowledge of animal nutrition to the formulation of rational rations
- Understand the phenomena and principles related to the exploitation of the nutrients of various foods during the feeding function to ensure the well-being of farmed animals and the production of excellent livestock products

- Recognize the importance of ensuring favorable living conditions for animals in the production of excellent products
- Understand the biological basis of animal performance
- Become familiar with the organization of production systems

General Competences

Taking into consideration the general competences that the degree-holder must acquire (as these appear in the Diploma Supplement and appear below), at which of the following does the course aim?

Search for, analysis and synthesis of data and information, with the use of the necessary technology	*Search for, analysis and synthesis of data and information, with the use of the necessary technology*
Adapting to new situations	*Adapting to new situations*
Decision-making	*Decision-making*
Working independently	*Working independently*
Team work	*Team work*
Working in an international environment	*Working in an international environment*
Working in an interdisciplinary environment	*Working in an interdisciplinary environment*
Production of new research ideas	*Production of new research ideas*

Search, analysis and synthesis of data and information, using the necessary technologies:

- Autonomous work
- Group work
- Respect for the natural environment
- Promotion of free, creative and inductive thinking

3.SYLLABUS

1. Social and economic importance of animal production
2. Benefits of farm animals to humans.
3. Contribution of animal production to solving the global food problem.
4. Data on world livestock and production.
5. Origin, domestication, and evolution of farm animals. Changes undergone by farm animals during domestication.
6. Classification of farm animals into breeds. Description of the main breeds in cattle, sheep, goats and pigs. Importance of conservation of rare breeds.
7. Feed consumption and digestion, metabolism, animal energy requirements, nitrogenous substances, minerals, vitamins, and other nutrients
8. Biological value of dietary proteins
9. Physiology - anatomy of animals.
10. Feed analysis. Determining the needs of the various developmental and productive stages of the farmed organisms.
11. Systems for assessing the nutritional value of animal feed.

4.TEACHING AND LEARNING METHODS - EVALUATION

DELIVERY *Face-to-face, Distance learning, etc.*	Face-to-face
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY *Use of ICT in teaching, laboratory education, communication with students*	Use of Information and Communication Technologies (ICTs) (e.g. powerpoint) in teaching. Communication with students: through e-mail, department's website and platform e-class. The lectures content of the course for each chapter are uploaded on the internet, in the form of a series of .pdf files, where students can freely download them from the platform e-class.upatras.gr
TEACHING METHODS *The manner and methods of teaching are described in detail.* *Lectures, seminars, laboratory practice, fieldwork, study and analysis of bibliography, tutorials,*	

Activities	*Work Load per semester*
Lectures (3 hours per week x 13 weeks)	39
Seminars (1 hour per week x 13 weeks)	57
Final examination (3 hours)	26
Non-guided study	3

placements, clinical practice, art workshop, interactive teaching, educational visits, project, essay writing, artistic creativity, etc. *The student's study hours for each learning activity are given as well as the hours of non-directed study according to the principles of the ECTS*	***Total number of hours for the Course (25 hours of work-load per ECTS credit)***	**125**
STUDENT PERFORMANCE EVALUATION *Description of the evaluation procedure* *Language of evaluation, methods of evaluation, summative or conclusive, multiple choice questionnaires, short-answer questions, open-ended questions, problem solving, written work, essay/report, oral examination, public presentation, laboratory work, clinical examination of patient, art interpretation, other* *Specifically-defined evaluation criteria are given, and if and where they are accessible to students.*	Written examination after the end of the semester (100%) including: • Multiple-choice questions • Solving probability and probability distributions problems • Benchmarking theory elements Grading scale: 1 to 10. Minimum passing grade: 5. Examination time: 3 hours.	

5.**ATTACHED BIBLIOGRAPHY**

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3. Bogner, H. and S. Koegel (1984): Die Nutzleistungen des Rindes. In: Wirtschaftliche Milchviehhaltung and
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9. Animals, 2nd edn. Baillière, Tindall & Cassell, London, pp.22-42
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