

COURSE LAYOUT

1. GENERAL

SCHOOL	School of Animal Sciences		
DEPARTMENT	Animal Science		
STUDY LEVEL	<i>Undergraduate</i>		
COURSE CODE	161	SEMESTER	5 th
DEPARTMENT	Department of Animal Science		
COURSE TITLE	Quality and safety of animal food products		
INDEPENDENT TEACHING ACTIVITIES		WEEKLY TEACHING HOURS	ECTS
Theory, Laboratory Practicals		4	4
COURSE TYPE (Foundation course, General knowledge, Scientific area, Developing skills)		Scientific area	
PREREQUISITES			
LANGUAGE	Greek		
IS THE COURSE OFFERED for ERASMUS STUDENTS?	Yes (in English)		
COURSE WEB PAGE	https://mediasrv.aua.gr/eclass/courses/EZPY188/		
TEACHING STAFF	Athanasios Gelasakis, Nikolaos Chorianopoulos, Panagiotis Simitzis, Paschalitsa Trifinopoulou,		

2. LEARNING OUTCOMES

Learning Outcomes
<ul style="list-style-type: none"> Understanding of physiological and management factors, as well as chemical, nutritional, technological, organoleptic, biological, microbiological and hygiene parameters which determine and describe the intrinsic quality and safety of animal derived food products with emphasis given in meat, milk and dairy products, eggs, fisheries and honey. Understanding the contribution of livestock production to the availability of products, in the food value chains, which are compatible with the current and emerging public perception of the quality and safety of animal products. Understanding the basic principles of 'One Health', the significance of zoonotic and foodborne diseases, the transmission dynamics, prevention and control of food-borne pathogens across animal-derived food value chains
General Competences
<ul style="list-style-type: none"> Adaptation to the current situation Decision making Autonomous work Team work Development of innovative ideas Respect and protection of the environment

3. COURSE CONTENT

<ul style="list-style-type: none"> Description and analysis of intrinsic quality and safety traits of meat, milk and dairy products, eggs, fisheries and honey.
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- Legislative framework which determines the production, processing and safety prerequisites of animal-derived food products.
- Challenges and trends regarding the production of safe and of superior quality animal food products.
- Description of physiological (breed, age, sex, productive stage) and management factors (standard farming practices, farming systems, nutrition, as well as housing, transportation and slaughtering conditions) and analysis of their effects on the quality and safety of animal food products across the farm to fork value chains.
- The significance of farming conditions, health, welfare and euthanasia status for the quality, hygiene and safety of animal food products.
- Methods for the assessment of intrinsic quality and safety of animal food products with emphasis on their nutritional value, organoleptic traits and hygiene.
- Food-borne diseases and their significance for public health.
- The use of chemotherapeutic drugs in livestock and their correlation with food safety. Antibiotic resistance. Traceability.
- Genetics and epigenetics on the safety and quality of animal food products.
- Food technology and quality assurance in meat, milk, eggs, fisheries, honey and products thereof.

4. TEACHING and LEARNING METHODS - Evaluation

TEACHING METHOD	Lecturing – Classroom discussion	
USE OF INFORMATICS and COMMUNICATION TECHNOLOGIES	Internet (infographics, videos), communication via e-mail, exploitation of electronic platforms to support teaching (e.g. open e-class, e-student, Microsoft teams)	
TEACHING ORGANISATION (Lectures, individual or group assignments, field trips, individual study et.c.)	Activities	Workload per semester
	Individual study	70
	Lectures uploaded at open e-class, with self-assessment quiz	30
	Total contact hours and training	100
STUDENTS EVALUATION	<p>Language: Greek for Greek students and English for Erasmus students.</p> <p>Written tests using, completion type, multiple choice and alternative response (True/False) questions</p> <p>For Erasmus students oral tests and evaluation of presentations on relevant topics.</p>	

5. BIBLIOGRAPHY

Suggested scientific journals:

- Nature Sustainability
- Trends in Food Science and Technology
- Comprehensive Reviews in Food Science and Food Safety
- Global Food Security
- Applied and Environmental Microbiology
- Journal of Dairy Science
- Food Control
- Meat Science
- International Journal of Food Microbiology
- Food Microbiology
- Food Quality and Safety