

Production of Aquatic Organisms [36]

COURSE OUTLINE

(1) GENERAL

SCHOOL	ANIMAL BIOSCIENCES		
ACADEMIC UNIT	DEPARTMENT OF ANIMAL SCIENCE		
LEVEL OF STUDIES	Undergraduate [Required]		
COURSE CODE	36	SEMESTER	8 th
COURSE TITLE	PRODUCTION OF AQUATIC ORGANISMS		
INDEPENDENT TEACHING ACTIVITIES		WEEKLY TEACHING HOURS	CREDITS
Theory and laboratory practice		6	4
Total		6	4
COURSE TYPE	Scientific area		
PREREQUISITE COURSES:			
LANGUAGE OF INSTRUCTION and EXAMINATIONS:	Greek		
IS THE COURSE OFFERED TO ERASMUS STUDENTS:	Yes		
COURSE WEBSITE (URL):	https://mediasrv.aua.gr/eclass/courses/EZPY169/ https://mediasrv.aua.gr/eclass/courses/EZPY168/		
TEACHING STAFF:	Nafsika Karakatsouli, Eleni Miliou, Konstantina Bitchava, Emmanouil Malandrakis, Arkadios Dimitroglou		

(2) LEARNING OUTCOMES

Learning outcomes
Upon successful completion of the course, students will be able (according to Bloom) to: - Describe the complete production procedures of the most common aquaculture organisms in Greece and internationally (Knowledge / Comprehension). - Apply proper handling techniques to aquatic organisms to ensure their welfare throughout the breeding and production periods (Application / Comprehension). - Assess and interpret the physiological status of aquatic organisms during production (Analysis / Evaluation). - Implement procedures during production, slaughtering, and processing to safeguard the quality of aquaculture products (Application / Synthesis / Evaluation).
General Competences
- Search, analysis and synthesis of data and information, utilizing modern technologies - Adaptation in various conditions - Decision-making - Independent personality - Teamwork skills - Consideration for the natural environment - Develop judgement and self-criticism - Promotion of free, creational and inductive thought

(3) SYLLABUS

- Hatcheries of aquatic organisms - Saltwater finfish breeding (gilthead seabream, European seabass) - Emerging candidate finfish species (red porgy, common pandora, sharpsnout seabream, tuna, meagre) - Freshwater and brackish water finfish farming (carp, trout, salmon) - Production of bivalve mollusks (oyster, mussel, scallop) - Production of cephalopods (octopus, cuttlefish) - Farming of gastropods (abalone) - Farming of decapod crustaceans (lobster, shrimps, crayfish)

- Seaweed cultivation (brown algae – kelps, red algae)
- Laboratory practical on assessment of production levels in aquaculture
- Laboratory practical on handlings during production (anaesthesia, weighting, blood sampling, tagging, transportation of live fish)
- Laboratory practical on fish harvesting and slaughtering methods
- Laboratory practical on processing and packaging of aquaculture products
- Laboratory practical on quality assessment of aquaculture products

(4) TEACHING and LEARNING METHODS - EVALUATION

DELIVERY	Face to face	
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY	• PowerPoint slideshows and video projections during teaching • Teaching activity support through e-class platform • Contact with the students via e-mail	
TEACHING METHODS	Activity	Semester workload
	Lectures	39
	Laboratory practicals focusing on methodology implementation and case studies in small student groups	39
	Individual study	22
	Course total (25 h of workload per ECTS)	100
STUDENT PERFORMANCE EVALUATION	Written exams	

(5) ATTACHED BIBLIOGRAPHY

-Proposed bibliography

1. Plant cultivation and animal breeding in aquaculture. Klaoudatos S and Klaoudatos D, Propompos publications. Eudoxus code: 12475860 (IN GREEK)
2. Fish endocrinology. Papoutsoglou S.E. Stamoulis publications. Eudoxus code: 22769 (IN GREEK)

-Proposed scientific journals:

Aquaculture, Aquacultural Engineering, Aquaculture International