**COURSE OUTLINE**

1. **GENERAL**

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| **SCHOOL** | SCHOOL OF HEALTH | | | | |
| **DEPARTMENT** | BIOLOGICAL APPLICATIONS AND TECHNOLOGY | | | | |
| **CURICULUM OF STUDIES** | UNDERGRATUATE | | | | |
| **LESSON CODE NUMBER** | ΒΕΕ812 | **SEMESTER** | | **7th-9th** | |
| **LESSON TITLE** | Aquaculture | | | | |
| **TEACHING ACTIVITIES** | | | **TEACHING HOURS PER WEEK** | | **ECTS** |
| Theory | | | 3 | | 6 |
| Lab | | | 3 | |
| **COURSE TYPE** | Specialised general knowledge  Skills Development | | | | |
| **PREQUISITIES:** | Zoology, Ichthyology | | | | |
| **TEACHING AND EXAMINATION LANGUAGE:** | Greek (Teaching, Examination)  English (Examination) | | | | |
| **ERASMUS** | The course is offered to exchange students. | | | | |

1. **LEARNING OUTCOME**

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| **LEARNING OUTCOME** |
| Acquire basic knowledge to overcome problems related to the cultivation of various aquatic organisms.  Most important cultivated aquatic organisms in Greece and worldwide.  Breeding methods and techniques  Water quality for aquaculture  Understanding the need for aquaculture in order to encounter overfishing. Aquaculture and nutrition  Selection of species for aquaculture, depending on prevailing conditions.  Organic aquacultures  Biotechnology and aquaculture |
| **GENERAL SKILLS** |
| • Implementation in practice  • Search, analyze and synthesize data and information, using the necessary technologies  • Autonomous work  • Environmental awareness  • Criticism and self-criticism  • Work at an interdisciplinary level  • Promote free, creative and inductive thinking |

1. **LESSON SUBJECT**

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| Introduction to aquaculture, history of aquaculture  General principles, forms, types and aquaculture systems, required conditions, environmental impacts and protection measures, water and quality standards.  Cultivation of important aquatic organisms: micro-algae, crustaceans, marine and inland fish species.  Principles of genetic improvement.  Principles of Reproduction  Feeding and feeding composition technology  Artificial reproduction, stages of embryonic development |

1. **TEACHING AND LEARNING METHODS - EVALUATION**

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| **COURSE OF TRAINING** | Face to face |
| **USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES** | • Use of ICT in Teaching  • Use of ICT in Laboratory Education  • Use of ICT in Communication with students |
| **TEACHING PROGRAMME** | |  |  | | --- | --- | | ***ACTIVITY*** | ***WORKLOAD*** | | LECTURES | 39 | | LABORATORY EXCERSISES | 9 | | OUTDOOR EXCERSISES | 18 | | PROSSESING OF SCIENTIFIC PAPERS | 3 | | USE OF PC APPLICATIONS | 3 | | TOTAL WORKLOAD | ***72*** | |
| **STUDENT EVALUATION** | Written examination, co-operational work, general assessment of the student's ability and interest.  Methods of Student Assessment  Written Examination with Short Response Questions  Extensive Answer Writing  Written report |

1. **ATTACHED BIBLIOGRAPHY**

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| Παπουτσόγλου Σ. Εισαγωγή στις Υδατοκαλλιέργειες. Τόμος Ι. Εκδόσεις Σταμούλη, Αθήνα. Πάσχος Ι. Ιχθυοκαλλιέργειες Εσωτερικών Υδάτων. Εκδόσεις Σταμούλη,Αθήνα. Λεονάρδος Ι. Σημειώσεις Υδατοκαλλιεργειών . Τυπογραφείο Πανεπιστημίου Ιωαννίνων  -ADITIONAL LITERATURE:  Aquaculture |