**COURSE OUTLINE**

1. **GENERAL**

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| **SCHOOL** | HEALTH SCIENCES |
| **DEPARTMENT** | BIOLOGICAL APPLICATIONS ANDTECHNOLOGY |
| **LEVEL OF STUDIES** | UNDERGRADUATE |
| **COURSE CODE** | BEY901 - BEYA01 | **SEMESTER** | **9TH - 10TH**  |
| **COURSE TITLE** | DIPLOMA THESIS – EXPERIMENTAL RESEARCH  |
| **INDEPENDENT TEACHING ACTIVITIES** | **WEEKLY****TEACHING****HOURS** | **CREDITS** |
| *Laboratory/Field Research Activities (exercises, experiments, results processing)* | N/A\* | 60 |
| **COURSE TYPE** | SPECIALISED KNOWLEDGE |
| **PREREQUISITE COURSES:** | *For a student to apply for the commencement of the diploma thesis he/she should meet the following prerequisites that correspond to the first eight semesters of study:**(a) 161 TU if the acad. year of his/her registration is until 2007-08,**(b) 192 ECTS if the acad. year of his/her registration is 2008-09 or 2009-10 and**(c) 192 ECTS if the acad. year of his/her registration is from 2010-11 onwards.**Additionally, the supervisor may set extra criteria with regards to the successful completion of specific courses that are relevant to his/her research field.* |
| **LANGUAGE OF INSTRUCTION****and EXAMINATIONS:** | GREEK OR ENGLISH |
| **IS THE COURSE OFFERED TO****ERASMUS STUDENTS?** | YES |
| **COURSE WEBSITE (URL)** |  |

*\*N/A: Not Applicable*

1. **LEARNING OUTCOMES**

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| **Learning outcomes** |
| The aim is for the student to become familiar with the scientific way of thinking and the process of producing new, original knowledge. Through this activity, the student gains practical experience in research methodologies, experimental approaches and specialized knowledge & skills related to the specific scientific field. The student also learns to collaborate, practices in the review and use of literature and of the existing knowledge, comprehends the importance of documenting observation and of the correct formulation of conclusions, learns to formulate scientific questions, to evaluate experimental results and analyse them critically emphasizing their contribution to the scientific field in question. The student also gains experience in writing a scientific text and in discussing and presenting scientific data. |
| **General Competences** |
| * Development of social professional and moral responsibility
* Ability to develop new research ideas and research skills
* Time-management skills
* Familiarity with the rules of safety in the workplace
* Identification of hazards in the workplace, management of hazardous situations, resolution, and practical problems
* Familiarity with autonomous work and teamwork
* Development of critical ability and evaluation of experimental data for decision making
* Adaptability to different environments and situations
* Acquisition of knowledge about the working environment and working conditions
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1. **CONTENT**

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| The content depends on the research question and the scientific field of the Diploma Thesis. |

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

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| **DELIVERY** | FACE-TO-FACE |
| **USE OF INFORMATION AND****COMMUNICATIONS TECHNOLOGY** | Specialized educational/research software - databases - results presentation software |
| **TEACHING METHODS** |

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| ***Activity*** | ***Semester workload (hours)*** |
| Literature review and study | 160 |
| Laboratory/Field training  | 160 |
| Non-directed study | 400 |
| Experimental research project  | 700 |
| Thesis writing  | 160 |
| Thesis presentation | 1 |
| Course total | ***1581*** |

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| **STUDENT PERFORMANCE EVALUATION** | A three-member committee evaluates the work after the following - *Presentation of the bibliography research**- Oral examination**- Thesis reading*and grades• The research project• The thesis• The presentation |

1. **SUGGESTED** **BIBLIOGRAPHY**

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| Depending on the science topic, appropriate international journals and books are selected. |