**COURSE OUTLINE**

1. **GENERAL**

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| **SCHOOL** | HEALTH SCIENCES | | | | |
| **DEPARTMENT** | DEPARTMENT OF BIOLOGICAL APPLICATIONS AND TECHNOLOGY | | | | |
| **LEVEL OF STUDIES** | undergraduate | | | | |
| **COURSE CODE** | **ΒΕΥ305** | **SEMESTER** | | **5th** | |
| **COURSE TITLE** | ANIMAL PHYSIOLOGY Ι | | | | |
| **INDEPENDENT TEACHING ACTIVITIES** *In the case of credits being awarded for separate components of the course, e.g. lectures, laboratory exercises, etc. If the credits are awarded for the entire course, give the weekly teaching hours and the total credits* | | | **WEEKLY TEACHING HOURS** | | **CREDITS** |
| *Lectures* | | | 3 | | 7 |
| *Laboratory Exercises, Half-yearly project* | | | 3 | |  |
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| *Add rows if necessary. The teaching organization and the teaching methods used are described in detail in (d).* | | |  | |  |
| **COURSE TYPE**  *general background,*  *specialized background, specialised*  *general knowledge, skills development* | Special background | | | | |
| **PREREQUISITE COURSES:** | not applicable | | | | |
| **LANGUAGE OF INSTRUCTION and EXAMINATIONS:** | Greek | | | | |
| **IS THE COURSE OFFERED TO ERASMUS STUDENTS** | Yes (in English language) | | | | |
| **COURSE WEBSITE (URL)** | http://ecourse.uoi.gr/course/view.php?id=363 | | | | |

1. **LEARNING OUTCOMES**

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| **Learning Outcomes** | |
| *The learning outcomes of the course are described, the specific knowledge, skills and competences of an appropriate level that students will acquire after successfully completing the course.*  *Consult Appendix A*   * *Description of the Level of Learning Outcomes for each course of study according to the European Higher Education Area Qualifications Framework* * *Descriptive Indicators of Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning & Appendix B* * *Guidelines for Learning Outcomes writing* | |
| The “Animal Physiology I” course describes and explains the function of the cell groups, organs and organ systems of the mammalian body (Neural, Hormonal, Homeostasis), with an emphasis on human body. Upon successful completion of the course the student will be able to (1) know and comprehend the operating principles of mammalian body organs and organ systems and the interaction mechanisms between different systems, (2) will have acquired skills with regards to the system operation performance testing through the laboratory exercises; and (3) will have acquired the ability to produce research reports (papers, short communications) through team projects. | |
| **General Competences** | |
| *Considering the general competencies that the graduate must have acquired (as listed in the Diploma Supplement and listed below), at which one (s) does the course aim?* | |
| *Search for, analysis and synthesis of data and information, with the use of the necessary technology*  *Adapting to new situations*  *Decision-making*  *Working independently*  *Team work*  *Working in an international environment*  *Working in an interdisciplinary environment*  *Production of new research ideas* | *Project planning and management*  *Respect for diversity and multiculturalism*  *Respect for the natural environment*  *Demonstration of social, professional and ethical responsibility and sensitivity to gender issues*  *Criticism and self-criticism*  *Production of free, creative and inductive thinking*  *……*  *Others…*  *…….* |
| * *Search for, analysis and synthesis of data and information, with the use of the necessary technology* * *Working independently* * *Team work* * *Working in an international environment* * *Working in an interdisciplinary environment* * *Production of new research ideas* | |

1. **COURSE SYLLABUS**

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| The “Animal Physiology I” course describes and explains the function of the cell groups, organs and organ systems of the mammalian body, with an emphasis on human body.  Initially, definitions are given, the course principles and objectives, principles of cell communication and membrane physiology.  The modules taught are as follows:  - Transport of molecules through membranes  - Homeostatic mechanisms and intercellular communication  - Nervous system control mechanisms  - Sensory systems  - Hormonal control system function principles  - Body motion control  - Consciousness and behaviour  Key elements of anatomy are taught, which are necessary for the understanding of functional principles. The emphasis is on the mechanisms governing functional phenomena. |

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

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| **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 PowerPoint software  Course information available on the electronic platform e-course  Announcements on the course website  Communication through e-mail correspondence |
| **TEACHING METHODS**  *The manner and methods of teaching are described in detail.*  *Lectures, seminars, laboratory practice, fieldwork, study and analysis of bibliography, tutorials, placements, clinical practice, art workshop, interactive teaching, educational visits, projects, report writing, artistic creativity, etc.*  *The student's study hours for each learning activity are given as well as the hours of non-guided study according to the ECTS principles.* | |  |  | | --- | --- | | ***Activity*** | ***Semester workload (study hours)*** | | Lectures | 117 | | Laboratory practice | 36 | | Projects | 22 | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | | Course total | **175** | |
| **STUDENT PERFORMANCE EVALUATION**  *Description of the evaluation procedure*  *Language of evaluation, methods of evaluation, summative or formative, 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, artistic interpretation, other.*  *Specifically-defined evaluation criteria are stated, and if and where those are accessible to students.* | Ι. Written final examination (70%) that includes:  - Multiple-choice questions  - Short-answer questions  - Filling in procedural maps  ΙΙ. Average score of short written evaluations following laboratory practise (20%)  ΙΙΙ. Writing and presentation of group projects (groups of 3 persons) (10%)  Evaluation criteria: They are reported annually at the first lecture of the course and repeated during the course if necessary. They are also posted on the course page (e-course). |

1. **ATTACHED BIBLIOGRAPHY**

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| *- Suggested Bibliography:*  *- Related scientific journals:*  Recommended Textbooks:  - Introduction to Human Physiology From Cells to Systems Lauralee Sherwood 8th Edition, Academic Publications Alexandroupoli 2016.  - Human Physiology, Vander, Sherman, Luciano, Tsakopoulos, Ed. Paschalidis, Volume I \* (\* the subject of Physiology II is now also included in one volume).  Laboratory Notes  Further bibliography is suggested (this is not distributed but the books are available from the University Library), in the “educational books” and “Physiology and Neuroscience Books” that are available from the central library.  Educational Websites (“Useful Links” and “on line dictionaries” at <http://ecourse.uoi.gr/course/view.php?id=363>)  Review papers available through the web. |