COURSE OUTLINE

(1) GENERAL

<table>
<thead>
<tr>
<th>SCHOOL</th>
<th>NATURAL SCIENCES</th>
</tr>
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<tbody>
<tr>
<td>ACADEMIC UNIT</td>
<td>DEPARTMENT OF BIOLOGY</td>
</tr>
<tr>
<td>LEVEL OF STUDIES</td>
<td>UNDERGRADUATE</td>
</tr>
<tr>
<td>COURSE CODE</td>
<td>BIO ΔΥ01</td>
</tr>
<tr>
<td>SEMESTER</td>
<td>4</td>
</tr>
</tbody>
</table>

COURSE TITLE: CELL BIOLOGY II

INDEPENDENT TEACHING ACTIVITIES
if credits are awarded for separate components of the course, e.g. lectures, laboratory exercises, etc. If the credits are awarded for the whole of the course, give the weekly teaching hours and the total credits

<table>
<thead>
<tr>
<th></th>
<th>WEEKLY</th>
<th>CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lectures</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>Practical exercises</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail at (d).

COURSE TYPE: Scientific specialized background
general background, special background, specialised general knowledge, skills development

PREREQUISITE COURSES:
Formally there are no prerequisites. However, knowledge of Biochemistry and Cell Biology I are recommended

LANGUAGE OF INSTRUCTION and EXAMINATIONS:
Greek

IS THE COURSE OFFERED TO ERASMUS STUDENTS

COURSE WEBSITE (URL)

(2) LEARNING OUTCOMES

Learning outcomes
The course learning outcomes, specific knowledge, skills and competences of an appropriate level, which the students will acquire with the successful completion of the course are described.

Consult Appendix A

- Description of the level of learning outcomes for each qualifications cycle, according to the Qualifications Framework of the European Higher Education Area
- Descriptors for Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning and Appendix B
- Guidelines for writing Learning Outcomes

Students will understand a) the structure and potential of cytoskeleton constituents and movement systems which concern cell movements and subcellular structures b) mechanisms and regulation of cell proliferation, ageing and death c) cell-cell interaction cell-matrix interaction and communication mechanisms among cells d) cancer cells e) structure and function of immune system and fundamental principles of immune response and innate immunity.
General Competences
Taking into consideration the general competences that the degree-holder must acquire (as these appear in the Diploma Supplement and appear below), at which of the following 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 difference and multiculturalism
Respect for the natural environment
Showing social, professional and ethical responsibility and sensitivity to gender issues
Criticism and self-criticism
Production of free, creative and inductive thinking

(3) SYLLABUS

Cellular recognition and fundamental principles of cell communication.
Cell cycle regulation. Cell proliferation.
Ageing, cell death, apoptosis.
Cancer.
Cell and molecular base of immune responses.

(4) TEACHING and LEARNING METHODS - EVALUATION

<table>
<thead>
<tr>
<th>DELIVERY</th>
<th>Face to face lectures in classroom and lab</th>
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</thead>
<tbody>
<tr>
<td>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</td>
<td>Face to face lectures in classroom and lab</td>
</tr>
<tr>
<td>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, project, essay writing, artistic creativity, etc.</td>
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<tr>
<td>TEACHING METHODS</td>
<td>Activity</td>
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<td>Lectures</td>
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<td>Lab practice</td>
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<tr>
<td>Lab reports</td>
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<td>Course study</td>
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<tr>
<td>Course total</td>
<td>200</td>
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</tbody>
</table>
STUDENT PERFORMANCE EVALUATION

Description of the evaluation procedure

Language of evaluation, methods of evaluation, summative or conclusive, 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, art interpretation, other

Specifically-defined evaluation criteria are given, and if and where they are accessible to students.

For every lab exercise students are asked to make a report based on the procedure and the techniques they have been trained.
The final examination of the course includes 4 general questions, 4 overall questions to proceed and 2 practical problems to solve with the use of the techniques they have learned in lab practice
The evaluation criteria are mentioned at the e-class of the course.

(5) ATTACHED BIBLIOGRAPHY

- Suggested bibliography:

- Related academic journals: