

COURSE OUTLINE

(1) GENERAL

SCHOOL	SCHOOL OF NATURAL SCIENCES		
ACADEMIC UNIT	DEPARTMENT OF BIOLOGY		
LEVEL OF STUDIES	UNDERGRADUATE		
COURSE CODE	BIO_ZB3	SEMESTER	5/7
COURSE TITLE	SELECTED TOPICS IN CELL BIOLOGY		
INDEPENDENT TEACHING ACTIVITIES <i>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</i>		WEEKLY TEACHING HOURS	CREDITS
Lectures		2	3
<i>Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail at (d).</i>			
COURSE TYPE <i>general background, special background, specialised general knowledge, skills development</i>	Scientific specialized background		
PREREQUISITE COURSES:	Formally there are no prerequisites. However, knowledge of Cell and Molecular Biology are recommended		
LANGUAGE OF INSTRUCTION and EXAMINATIONS:	Greek		
IS THE COURSE OFFERED TO ERASMUS STUDENTS			
COURSE WEBSITE (URL)			

(2) LEARNING OUTCOMES

<p>Learning outcomes</p> <p><i>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.</i></p> <p><i>Consult Appendix A</i></p> <ul style="list-style-type: none"> • <i>Description of the level of learning outcomes for each qualifications cycle, according to the Qualifications Framework of the European Higher Education Area</i> • <i>Descriptors for Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning and Appendix B</i> • <i>Guidelines for writing Learning Outcomes</i>
<p>The students will understand the mechanism of antibodies biosynthesis, their physiological role as well as their use in clinical examinations and research.</p>

<p>General Competences</p> <p><i>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?</i></p>	
<p><i>Search for, analysis and synthesis of data and information, with the use of the necessary technology</i></p> <p><i>Adapting to new situations</i></p> <p><i>Decision-making</i></p> <p><i>Working independently</i></p> <p><i>Team work</i></p> <p><i>Working in an international environment</i></p> <p><i>Working in an interdisciplinary environment</i></p> <p><i>Production of new research ideas</i></p>	<p><i>Project planning and management</i></p> <p><i>Respect for difference and multiculturalism</i></p> <p><i>Respect for the natural environment</i></p> <p><i>Showing social, professional and ethical responsibility and sensitivity to gender issues</i></p> <p><i>Criticism and self-criticism</i></p> <p><i>Production of free, creative and inductive thinking</i></p> <p><i>.....</i></p> <p><i>Others...</i></p> <p><i>.....</i></p>
<p><i>Search for, analysis and synthesis of data and information, with the use of the necessary technology</i></p> <p><i>Decision-making</i></p>	

(3) SYLLABUS

<p>Antigen capture and presentation to lymphocytes. Structure and function of Major Histocompatibility Complex [MHC] molecules.</p> <p>Antigen recognition and costimulation. Biochemical pathways of T and B cell activation. The complement system.</p> <p>Regulation of the immune response. Vaccination. Immunological techniques (affinity chromatography, ELISA, Western blot). B. Tumor growth and angiogenesis.</p>

(4) TEACHING and LEARNING METHODS - EVALUATION

<p>DELIVERY</p> <p><i>Face-to-face, Distance learning, etc.</i></p>	<p>Face to face lectures in classroom and lab</p>
<p>USE OF INFORMATION AND</p>	

<p>COMMUNICATIONS TECHNOLOGY Use of ICT in teaching, laboratory education, communication with students</p>		
<p>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, project, essay writing, artistic creativity, etc.</p> <p>The student's study hours for each learning activity are given as well as the hours of non-directed study according to the principles of the ECTS</p>	<p>Activity</p>	<p>Semester workload</p>
	Lectures	26
	Course study	49
	Course total	75
<p>STUDENT PERFORMANCE EVALUATION Description of the evaluation procedure</p> <p>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</p> <p>Specifically-defined evaluation criteria are given, and if and where they are accessible to students.</p>	Written exams at the end of the semester	

(5) ATTACHED BIBLIOGRAPHY

<p>- Suggested bibliography: Molecular biology of the cell. Alberts et al. Garland science 1995</p> <p>- Related academic journals:</p>
