

## COURSE OUTLINE

### (1) GENERAL

<b>SCHOOL</b>	SCHOOL OF SCIENCES		
<b>ACADEMIC UNIT</b>	PHYSICS DEPARTMENT		
<b>LEVEL OF STUDIES</b>	POSTGRADUATE		
<b>COURSE CODE</b>	M326	<b>SEMESTER</b>	2
<b>COURSE TITLE</b>	PRACTICE OF PHYSICS TEACHING II		
<b>INDEPENDENT TEACHING ACTIVITIES</b> <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>	<b>WEEKLY TEACHING HOURS</b>	<b>CREDITS</b>	
		5	
<i>Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail at (d).</i>			
<b>COURSE TYPE</b> <i>general background, special background, specialised general knowledge, skills development</i>	Skills development		
<b>PREREQUISITE COURSES:</b>			
<b>LANGUAGE OF INSTRUCTION and EXAMINATIONS:</b>	Greek		
<b>IS THE COURSE OFFERED TO ERASMUS STUDENTS</b>	Yes		
<b>COURSE WEBSITE (URL)</b>			

### (2) LEARNING OUTCOMES

<p><b>Learning outcomes</b></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"> <li>• <i>Description of the level of learning outcomes for each qualifications cycle, according to the Qualifications Framework of the European Higher Education Area</i></li> <li>• <i>Descriptors for Levels 6, 7 &amp; 8 of the European Qualifications Framework for Lifelong Learning and Appendix B</i></li> <li>• <i>Guidelines for writing Learning Outcomes</i></li> </ul>
<p><b>It is expected that upon successful completion of this course, the students will have acquired knowledge and skills related to the teaching of laboratory physics courses. Upon completion of the course the student will be able to:</b></p> <ul style="list-style-type: none"> <li>• <b>Observe, critically describe and critically analyse the didactic act taking advantage of teaching and pedagogical knowledge.</b></li> <li>• <b>Plan and organize a laboratory physics course including the preparation of the apparatus and the educational material.</b></li> <li>• <b>Prepare, correct and evaluate written assignments of a laboratory physics course.</b></li> </ul>
<p><b>General Competences</b></p> <p><i>Taking into consideration the general competences that the degree-holder must acquire (as these appear in the Diploma</i></p>

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

  

Decision making.  
Working independently.  
Production of free, creative and inductive thinking.

### (3) SYLLABUS

The students attend selected laboratory physics first year university courses and are invited to write down their observations and experiences and discuss them with the responsible of the course. The student is invited to take part in preparing and evaluating written assignments as well as presenting a 15 minute lecture on a selected subject.

### (4) TEACHING and LEARNING METHODS - EVALUATION

<b>DELIVERY</b> <i>Face-to-face, Distance learning, etc.</i>	Face-to-face	
<b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b> <i>Use of ICT in teaching, laboratory education, communication with students</i>		
<b>TEACHING METHODS</b> <i>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.  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</i>	<b>Activity</b>	<b>Semester workload</b>
	Attending Lectures	10
	Lecture preparation	10
	Assessment preparation and marking	20
	Critical analysis of lectures	10
	Autonomous learning	55
	Study and analysis of bibliography	20
	<b>Course total</b>	<b>125</b>
<b>STUDENT PERFORMANCE EVALUATION</b>		

<p><i>Description of the evaluation procedure</i></p> <p><i>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</i></p> <p><i>Specifically-defined evaluation criteria are given, and if and where they are accessible to students.</i></p>	<p>The final course grade is calculated by taking into account (a) The participation in the critical assessment of teaching and homework making (b) the lecture prepared by the student</p>
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## **(5) ATTACHED BIBLIOGRAPHY**

<p>- Suggested bibliography:</p> <ul style="list-style-type: none"> <li>• Five Easy Lessons: Strategies for Successful Physics Teaching, Randall D. Knight, Pearson (2002)</li> <li>• Subject related bibliography</li> </ul>
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