

## COURSE OUTLINE

### (1) GENERAL

<b>SCHOOL</b>	School of Environment		
<b>ACADEMIC UNIT</b>	Department of Environment		
<b>LEVEL OF STUDIES</b>	Undergraduate		
<b>COURSE CODE</b>	<b>105Y</b>	<b>SEMESTER</b>	<b>3</b>
<b>COURSE TITLE</b>	Research Methods I		
<b>INDEPENDENT TEACHING ACTIVITIES</b>		<b>WEEKLY TEACHING HOURS</b>	<b>CREDITS</b>
Lectures			
Laboratory exercises		4	
<b>Total credits</b>			<b>5</b>
<b>COURSE TYPE</b>	General background		
<b>PREREQUISITE COURSES:</b>	-		
<b>LANGUAGE OF INSTRUCTION and EXAMINATIONS:</b>	Greek		
<b>IS THE COURSE OFFERED TO ERASMUS STUDENTS</b>	No		
<b>COURSE WEBSITE (URL)</b>	<a href="https://www.env.aegean.gr/all_courses/research-methods-i/">https://www.env.aegean.gr/all_courses/research-methods-i/</a>		

### (2) LEARNING OUTCOMES

<b>Learning outcomes</b>
<p>The basic goals of this course are to familiarize the students with quantitative and qualitative research methods used in environmental science and acquaint them with a variety of research tools.</p> <p>By completion of this course, students will be able to:</p> <ul style="list-style-type: none"> <li>• understand the basic components of designing research in environmental science</li> <li>• Identify and evaluate the appropriateness of the research methodology for the study</li> </ul>
<b>General Competences</b>
<p>Search for, analysis and synthesis of data and information, with the use of the necessary technology</p> <p>Working independently</p> <p>Team work</p> <p>Production of new research ideas</p> <p>Criticism and self-criticism</p>

### (3) SYLLABUS

<ol style="list-style-type: none"> <li>1. Introduction, course overview, learning outcomes and way of assessment /grading</li> <li>2. Scientific research: goals and components. Research Laboratories at the Department of Environment. Ethics for researchers.</li> <li>3. Research Stages. Research Problem.</li> <li>4. Variables and Scales of Measurement. Research Question. Research Hypothesis.</li> <li>5. Search Skills for Bibliographic Databases. Reference List and Bibliography.</li> <li>6. Assignment Writing guidelines. Assignment Presentation. How to avoid Plagiarism.</li> <li>1st Assignment. Article Analysis Assignment.</li> <li>7. Literature Review I.</li> <li>2nd Assignment. Literature Review.</li> <li>8. Literature Review II.</li> </ol>
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9. Sample, Population, Sampling Methods.  
 10. Quantitative & Qualitative Research methods I. Questionnaire. Interview.  
 3rd Assignment: Steps in Research Process.  
 11. Quantitative & Qualitative Research methods II. Participant Observation method. Focus Groups.  
 Content Analysis.  
 12 & 13. Oral Presentation Assignment.

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

<b>DELIVERY</b>	Face-to-face	
<b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b>	The course is based on Moodle Platform (notes, presentations-ppts', quizzes, assignments, communication with students).	
<b>TEACHING METHODS</b>	<b>Activity</b>	<b>Semester workload</b>
	Laboratory practice	13 weeks X 4 hours/week =52
	Essay writing	35
	Study and analysis of bibliography	30
	Course total	<b>117</b>
<b>STUDENT PERFORMANCE EVALUATION</b>	Language of evaluation: Greek Methods of evaluation:  Multiple choice questionnaires 10% short-answer questions 15% open-ended questions 25% 1 <sup>st</sup> Assignment 10% 2 <sup>nd</sup> Assignment 20% 3 <sup>rd</sup> Assignment 20%	

#### (5) ATTACHED BIBLIOGRAPHY

##### - Suggested bibliography:

Ζαφειρόπουλος Κ. 2024. Πώς γίνεται μια επιστημονική εργασία;, Εκδόσεις Κριτική, Αθήνα.  
 Λιαργκόβας Π. 2022. Μεθοδολογία της Έρευνας και Συγγραφή Επιστημονικών Εργασιών, Εκδόσεις Α. ΤΖΙΟΛΑ & ΥΙΟΙ Α.Ε., Αθήνα.  
 Collin R. 2010. Η έρευνα του πραγματικού κόσμου, Gutenberg, Αθήνα.  
 Creswell J.W. 1994. Research design: qualitative and quantitative approaches. Sage: Thousand Oaks.  
 Marshall P. 1997. Research methods: how to design and conduct a successful project. How to Books: Plymouth.  
 Salkind N.J. 1997. Exploring Research. Prentice-Hall: New Jersey • Yin R.K. 1994. Case study research: design and methods. Sage: Thousand Oaks.

##### - Related academic journals:

International Journal of Social Research Methodology  
 International Journal of Research & Method in Education  
 International Journal of Qualitative Methods

