

## COURSE OUTLINE

### (1) GENERAL

<b>SCHOOL</b>	School of Sciences		
<b>ACADEMIC UNIT</b>	Department of Physics		
<b>LEVEL OF STUDIES</b>	Graduate Studies		
<b>COURSE CODE</b>	M325	<b>SEMESTER</b>	2
<b>COURSE TITLE</b>	Methodology of Educational Research		
<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>
		3	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>	General background		
<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>	<a href="http://ecourse.uoi.gr/course/view.php?id=53">http://ecourse.uoi.gr/course/view.php?id=53</a>		

### (2) LEARNING OUTCOMES

<b>Learning outcomes</b> <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> <i>Consult Appendix A</i> <ul style="list-style-type: none"> <li>• Description of the level of learning outcomes for each qualifications cycle, according to the Qualifications Framework of the European Higher Education Area</li> <li>• Descriptors for Levels 6, 7 &amp; 8 of the European Qualifications Framework for Lifelong Learning and Appendix B</li> <li>• Guidelines for writing Learning Outcomes</li> </ul>
<p>Students who will successfully complete this course should be able to recognise the importance and most common methods and research techniques of Scientific Educational Research; to distinguish and apply appropriate quantitative and qualitative approaches, to distinguish and evaluate the sufficiency of research practices with regards to the sampling, processing and analysis of research material. They should also be able to handle primary and secondary research data, to use applications for the collection, processing and analysis of research material, to successfully apply standards for the writing of scientific texts, and to be able to make effective use of information and information resources.</p>

### 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

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Others...

.....

Decision making

Independent work & teamwork

Working in an interdisciplinary environment

Demonstration of social, professional and moral responsibility

Exercise of criticism and self-criticism

Production of new research ideas

### (3) SYLLABUS

1. Theory & Science
2. Development of a Research Plan
3. Recognition of Research Problem
4. Literature Review [Research, retrieval, organisation, handling of sources, identification and formulation of the research project objective (s)]
5. Research Questions / Assumption
6. Quantitative approaches
7. Qualitative approaches
8. Survey Designs
9. Correlational Designs
10. Experimental Designs
11. Analyzing and Interpreting Quantitative Data
12. Analyzing and Interpreting Qualitative Data
13. Ethics and politics in Educational Research
14. Writing up Educational Research

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

<b>DELIVERY</b> <i>Face-to-face, Distance learning, etc.</i>	Teaching in the course room Handling of distance learning environments												
<b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b> <i>Use of ICT in teaching, laboratory education, communication with students</i>	Acquaintance with special software [SPSS, PSPP, Microsoft Excel, Remark Office, Atlas.ti, MaxQDA] Asynchronous e-learning platform ecourse.uoi.gr												
<b>TEACHING METHODS</b> <i>The manner and methods of teaching are described in detail.</i> <i>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.</i>  <i>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>	<table><tr><th>Activity</th><th>Semester workload</th></tr><tr><td>Seminars</td><td>35</td></tr><tr><td>Preparation and submission laboratory exercises</td><td>25</td></tr><tr><td>Study of bibliography</td><td>30</td></tr><tr><td>Research Projects</td><td>35</td></tr><tr><td>Course total</td><td>125</td></tr></table>	Activity	Semester workload	Seminars	35	Preparation and submission laboratory exercises	25	Study of bibliography	30	Research Projects	35	Course total	125
Activity	Semester workload												
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STUDENT PERFORMANCE EVALUATION	
<p><i>Description of the evaluation procedure</i>  <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>  <i>Specifically-defined evaluation criteria are given, and if and where they are accessible to students.</i></p>	<ul style="list-style-type: none"> <li>• Attendance and participation in the courses: 10%</li> <li>• Preparation and submission laboratory exercises: 35%</li> <li>• Projects: 45%</li> <li>• Exam multiple-choice questions: 10%</li> </ul>

## (5) ATTACHED BIBLIOGRAPHY

- Suggested bibliography:

1. Babbie, E. (2011). *Εισαγωγή στην κοινωνική έρευνα*. Αθήνα: Κριτική.
2. Cohen, L., Manion, L. & Morrison, K. (2008). *Μεθοδολογία Εκπαιδευτικής Έρευνας*. Αθήνα: Μεταίχμιο.
3. Creswell, J. W. (2011). *Η έρευνα στην εκπαίδευση. Σχεδιασμός, διεξαγωγή και αξιολόγηση της ποσοτικής και ποιοτικής έρευνας*. Αθήνα: Ίων/Έλλην.
4. De Vaus, D. (2008). *Ανάλυση κοινωνικών δεδομένων*. Αθήνα: Ελληνικά Γράμματα.
5. Martin, O. (2008). *Η ανάλυση ποσοτικών δεδομένων*. Αθήνα: Τόπος
6. Robson, C. (2010). *Η έρευνα του πραγματικού κόσμου. Ένα μέσο για κοινωνικούς επιστήμονες και επαγγελματίες ερευνητές*. Αθήνα: Gutenberg.
7. Γιαλαμάς, Β. (2007). *Στατιστικές τεχνικές και εφαρμογές στις επιστήμες της αγωγής*. Αθήνα: Πατάκη.
8. Ιωσηφίδης, Θ. (2008). *Ποιοτικές μέθοδοι έρευνας στις κοινωνικές επιστήμες*. Αθήνα: Κριτική.
9. Κατσης, Α., Σιδερίδης, Γ., & Εμβαλωτής, Α. (2011). *Στατιστικές Μέθοδοι στις Κοινωνικές Επιστήμες*. Αθήνα: Τόπος
10. Μπονίδης, Κ. Θ. (2012). *Το περιεχόμενο του σχολικού βιβλίου ως αντικείμενο έρευνας: Διαχρονική εξέταση της σχετικής έρευνας και μεθοδολογικές προσεγγίσεις*. Αθήνα: Μεταίχμιο.
11. Παπαναστασίου, Κ., & Παπαναστασίου, Ε. (2005). *Μεθοδολογία Εκπαιδευτικής Έρευνας*. Κύπρος: Kailas Printers and Lithographers Ltd.
12. Ρούσσοι, Π. Α., & Τσαούσης, Γ. (2011). *Στατιστική στις επιστήμες της συμπεριφοράς με τη χρήση του SPSS*. Αθήνα: Τόπος.

- Related academic journals:

[American Educational Research Journal](#)  
[British Educational Research Journal](#)  
[Educational Research](#)  
[Educational Research and Evaluation](#)  
[Educational Research for Policy and Practice](#)  
[Educational Research Review](#)  
[Educational Researcher](#)  
[International Journal of Educational Research and Innovation](#)  
[International Journal of Science Education](#)  
[Journal of Educational Research](#)  
[Journal of New Approaches in Educational Research](#)  
[Review of Educational Research](#)  
[Scandinavian Journal of Educational Research](#)