

COURSE OUTLINE

(1) GENERAL

SCHOOL	School of Information Sciences and Technology		
ACADEMIC UNIT	Department of Statistics		
LEVEL OF STUDIES	Undergraduate – 1 st cycle		
COURSE CODE	6117	SEMESTER	8th
COURSE TITLE	RESEARCH METHODOLOGY		
INDEPENDENT TEACHING ACTIVITIES		WEEKLY TEACHING HOURS	CREDITS
		4	7
COURSE TYPE	Elective - Skills Development		
PREREQUISITE COURSES:	No		
LANGUAGE OF INSTRUCTION and EXAMINATIONS:	Greek		
IS THE COURSE OFFERED TO ERASMUS STUDENTS	No		
COURSE WEBSITE (URL)	https://www.dept.aueb.gr/en/stat/content/research-methodology-7-ects		

(2) LEARNING OUTCOMES

Learning outcomes
<p>Upon completion of the course students will be able to:</p> <ul style="list-style-type: none"> • To search, read scientific announcements and separate the different parts of which each one consists • To be able to identify problematic points in studies as well as ethical issues • To understand the necessity of using different tools to measure variables of interest and, where necessary, to be able to obtain information regarding their reliability and validity • To be able to formulate the different stages in designing a research and all its individual characteristics
General Competences
<ul style="list-style-type: none"> • Search, analysis and synthesis of data and information, using the necessary technologies • Adaptation to new situations • Decision-making • Working independently • Teamwork

- Working in an international environment
- Working in an interdisciplinary environment
- Production of new research ideas
- Project planning and management
- Respect for difference and multiculturalism
- Showing social, professional and ethical responsibility and sensitivity to gender issues
- Production of free, creative and inductive thinking

(3) SYLLABUS

The research process. Research-Research Methodology-Research Methods. The research question. The concepts and their measurement - Operational definition. Reading and evaluation of literature. Sources of existing information (secondary data). Methods of sample collection, Measurement tools, Types of scales, Indicators of validity and reliability, Tool for creating an electronic questionnaire, Practices for organizing the questionnaire. Writing a written report using academic writing formatting criteria. Use of appropriate software to detect content-plagiarism similarity (Turnitin) of the written report. Use of appropriate software for the presentation of research results.

(4) TEACHING and LEARNING METHODS - EVALUATION

DELIVERY	Face to Face	
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY	<p>In teaching: Search engines, Google Forms, Excel, Statistical package, Powerpoint</p> <p>In communication with students: Feedback to students through the process of submitting-checking material at different stages of conducting their empirical research through the "Ergasia" tool (eclass). Checking similarity for plagiarism through the Turnitin tool (office 365-aueb) E-mail Use of group chat in Microsoft Teams</p>	
TEACHING METHODS	Activity	Semester workload
	Classroom lectures	52
	Seminars	4
	Laboratory Exercise	12
	Study and analysis of literature	27
	Writing of assignments	30
	Course total	175

STUDENT PERFORMANCE EVALUATION	<p>Written exam at the end of the semester. Project. Presentation</p> <p>Information available at: eclass, Department Website</p>
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(5) ATTACHED BIBLIOGRAPHY

<ul style="list-style-type: none"> • Veal A.J., Χρήστου Ε. (2022). Ερευνητικές Μεθοδολογίες στις Κοινωνικές Επιστήμες. BROKEN HILL PUBLISHERS LTD • Καλογεράκη Στ. (2020). Σχεδιασμός και κατασκευή ερωτηματολογίων στην κοινωνική έρευνα. Κριτική • Δαρβίρη Χρ. (2009). Μεθοδολογία Έρευνας στο Χώρο της Υγείας. ΙΑΤΡΙΚΕΣ ΕΚΔΟΣΕΙΣ Π. Χ. ΠΑΣΧΑΛΙΔΗΣ • Gall, M., Borg, W & Gall, J. (2013). Εκπαιδευτική Έρευνα-Βασικές Αρχές, BROKEN HILL PUBLISHERS LTD • Σταλίκας, Α. Κυριάζος, Θ. (2019.) Μεθοδολογία έρευνας και Στατιστική Με τη χρήση R. ΜΟΤΙΒΟ ΕΚΔΟΤΙΚΗ Α.Ε. • Creswell J. D, Creswell W J. (2019). Σχεδιασμός Έρευνας. ΠΡΟΠΟΜΠΟΣ • Gay R.L, Mills E.G, Airasian, P. (2017). Εκπαιδευτική Έρευνα. ΠΡΟΠΟΜΠΟΣ • Schindler S. P .(Συγγρ.) - Αποστολάκης Αλ., Κουργιαντάκης Μ. (Επιμ.).(2019). Μέθοδοι έρευνας για τις επιχειρήσεις. Εκδόσεις Κριτική Α.Ε. • Gray D. (Συγγρ.)- Χατζόγλου, Πρ., Δελιάς Π (Επιμ.) (2018). Η ερευνητική μεθοδολογία στον πραγματικό κόσμο. Εκδόσεις Α. ΤΖΙΟΛΑ & ΥΙΟΙ Α.Ε. • Beatty, P. C., Collins, D., Kaye, L., Padilla, J. L., Willis, G. B., & Wilmot, A. (Eds.). (2019). Advances in questionnaire design, development, evaluation and testing. John Wiley & Sons. [electronic resource] https://onlinelibrary.wiley.com/doi/book/10.1002/9781119263685 • Kenett, R., & Salini, S. (2012). Modern Analysis of Customer Surveys. Jhon Wiley and Sons. [electronic resource] https://onlinelibrary.wiley.com/doi/book/10.1002/9781119961154 • Biemer, P. P., Groves, R. M., Lyberg, L. E., Mathiowetz, N. A., & Sudman, S. (Eds.). (2013). Measurement errors in surveys (Vol. 548). John Wiley & Sons. [electronic resource] https://onlinelibrary.wiley.com/doi/book/10.1002/9781118150382
