COURSE OUTLINE

(1) GENERAL

SCHOOL	Social Sciences		
ACADEMIC UNIT	Department of Sociology		
LEVEL OF STUDIES	Undergraduate		
COURSE CODE	**650**	**SEMESTER**	**4th**
COURSE TITLE	Quantitative Methods in the Social Sciences		

INDEPENDENT TEACHING ACTIVITIES *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*	**WEEKLY TEACHING HOURS**	**CREDITS**
Lectures	3	6
Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail at (d).		

COURSE TYPE *general background, special background, specialised general knowledge, skills development*	Mandatory by choice/ Skills Development / Specialised general knowledge
PREREQUISITE COURSES:	No
LANGUAGE OF INSTRUCTION and EXAMINATIONS:	Greek
IS THE COURSE OFFERED TO ERASMUS STUDENTS	No
COURSE WEBSITE (URL)	https://www.soc.aegean.gr/ext-files/pm/pps/2022-650-en.pdf

(2) LEARNING OUTCOMES

Learning outcomes

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.

Consult Appendix A

- *Description of the level of learning outcomes for each qualifications cycle, according to the Qualifications Framework of the European Higher Education Area*
- *Descriptors for Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning and Appendix B*
- *Guidelines for writing Learning Outcomes*

By the end of the semester, students will be able to:

- Understand the usefulness of different research methods and tools depending on the research questions and the complementarity between quantitative and qualitative methods.
- Understand the concept of quantitative research in social work and its underlying ontological and epistemological principles.
- Understand and know the methods of research design, formulation of research questions, analytical framework and presentation of results.
- Identify dependent and independent variables that need to be analysed when answering specific research questions.
- Be familiar with the methods and tools of quantitative data collection.
- Know the methods of statistical analysis of quantitative survey data.
- Is sensitised to ethical issues in quantitative research.
- Work effectively in teams.
- Develop study and research skills.

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	*Project planning and management*
Adapting to new situations	*Respect for difference and multiculturalism*
Decision-making	*Respect for the natural environment*
Working independently	*Showing social, professional and ethical responsibility and sensitivity to gender issues*
Team work	*Criticism and self-criticism*
Working in an international environment	*Production of free, creative and inductive thinking*
Working in an interdisciplinary environment	*……*
Production of new research ideas	*Others…*
	…….

- Promote free, creative and inductive thinking.
- Search, analysis and synthesis of data and information, using the necessary technologies
- Adaptation to new situations
- Decision-making
- Autonomous work
- Teamwork
- Working in an international environment
- Working in an interdisciplinary environment
- Generating new research ideas

(3) SYLLABUS

The aim of the course is to familiarise students with the basic directions of quantitative research in the social sciences. The focus on quantitative methods will be sought after understanding the different research methods and tools depending on the research questions, emphasising the difference and complementarity between quantitative and

qualitative methods. In this context, students will be familiarised with different types of data and methods of data collection and analysis, including descriptive and inferential statistical techniques. In particular, data and information will be researched and downloaded from official statistical sources (Eurostat) using the necessary technologies. Data will be processed and analysed using statistical software (SPSS, Excel). Lectures include a dialogue between the lecturer and students on research methods in the social sciences. Students must select the topic of the term paper from the first lectures so that they can apply the content of the lectures to the context of the project. To familiarise students with the use of SPSS software, a workshop will be held in which the lecturer will introduce the software and some of its basic functions which students will apply in their essay. The essay will be submitted by the students at the end of the semester and contributes to the final grade. The main teaching methods are therefore, on the one hand, lectures in which the theoretical topics are presented and, on the other hand, the practical application of the methods with the active participation of the students.

Organization of Lectures

1. Information about the course, the assignments and the examination method, research approach and procedure.
2. Scientific trends in research, quantitative and qualitative research methods, review and use of international literature, use of theory in quantitative, qualitative and mixed methods research.
3. Defining the research topic, formulating questions, defining the research strategy, identifying dependent and independent variables
4. Forms/types of data (primary, secondary), ways and sources of data collection.
5. Sampling methods, design of questionnaires and interviews.
6. Methods of analysis, data description techniques, statistical tests.
7. Collection, processing and coding of variables in excel.
8. Presentation of SPSS, data entry, performing descriptive statistics.
9. Calculation of correlations between variables, anova tests, T-tests, Chi-square tests, bivariate correlation, regression analysis.
10. Ways of presenting results, assumptions and limitations of the research, reliability and validity of measurements.
11. Course summary and preparation for examinations.
12. Discussion on the essays , corrections, suggestions for improvement.
13. Discussion of the essays, corrections, suggestions for improvement.

(4) TEACHING and LEARNING METHODS - EVALUATION

DELIVERY *Face-to-face, Distance learning, etc.*	Face-to face lectures
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY *Use of ICT in teaching, laboratory education, communication with students*	Statistical software (SPSS, excel) is used. The electronic platform available at the university is used for communication with students and the provision of educational material, as well as for the administration of student feedback.
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.*	

Activity	***Semester workload***
Lectures	39 hours
Studying	60 hours
Exam preparation	60 hours
Course total	***159 hours***

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	
STUDENT PERFORMANCE EVALUATION *Description of the evaluation procedure* *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* *Specifically-defined evaluation criteria are given, and if and where they are accessible to students.*	The final grade is based on the following parameters: 1. Attendance and participation in lectures (10%) 2. Semi-annual essay (40%) 3. Written examination at the end of the semester (50%) In addition to attendance and participation in lectures, students (either individually or in groups of up to two) will be required to write a semester-long laboratory essay based on the use of SPSS software to analyse a research question posed in the first lectures. The essay will be conducted as part of a tutorial-style lecture in which the solution will be demonstrated step-by-step and students will have the opportunity to ask their questions. In the final essay, which is handed in at the end of the semester, students are asked to analyse the results of the exercise in a text of up to 1,500 words. The semester examination comprises 20 multiple-choice questions and 2 development questions, one of which must be answered. On request, students will receive personalised support with course questions and improving their work. General verbal feedback on all essays and written feedback will be given on each individual essay.

(5) ATTACHED BIBLIOGRAPHY

Course Manuals:

- Babbie, E. (2011) Introduction to Social Research, Kritiki, Athens.

General bibliography:

- Bryman, A. (2017) Μέθοδοι κοινωνικής έρευνας, Gutenberg, Αθήνα.
- Creswell, J.W. and D.J. Creswell, (2019) Σχεδιασμός έρευνας. Προσεγγίσεις ποιοτικών, ποσοτικών και μεικτών μεθόδων, Αθήνα, Προπομπός
- Stockemer, D., (2019), Quantitative Methods for the Social Sciences: A Practical Introduction with Examples in SPSS and Stata, Springer.
- Field, A. (2016), Η διερεύνηση της στατιστικής με τη χρήση του SPSS της IBM, 1η εκδ, Προπομπός
- Λαμπριανού Ι., και Καϊλή Χ., Ποσοτικές Μέθοδοι στις Κοινωνικές Επιστήμες με τα λογισμικά R & SPSS, Κυπρος, Πάργα
- Χαλικιάς, Μ., Λάλου, Π., & Μανωλέσου, Α. (2015). Μεθοδολογία έρευνας και εισαγωγή στη Στατιστική Ανάλυση Δεδομένων με το IBM SPSS STATISTICS [Εργαστηριακός Οδηγός]. Κάλλιπος, Ανοικτές Ακαδημαϊκές Εκδόσεις. https://hdl.handle.net/11419/5075