

COURSE OUTLINE

(1) GENERAL

SCHOOL	Social Sciences		
ACADEMIC UNIT	Sociology		
LEVEL OF STUDIES	Postgraduate		
COURSE CODE	183-2022-04	SEMESTER	A
COURSE TITLE	Basic principles of statistical, demographic and epidemiological research with applications to contemporary migration/refugee movements (Sort title: Basic Terms in Statistics, Epidemiology, Demography in Migration Studies).		
INDEPENDENT TEACHING ACTIVITIES <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>	WEEKLY TEACHING HOURS	CREDITS	
	3	7.5	
<i>Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail at (d).</i>			
COURSE TYPE <i>general background, special background, specialised general knowledge, skills development</i>	Mandatory, General background, Skills development		
PREREQUISITE COURSES:	Statistics in a basic level		
LANGUAGE OF INSTRUCTION and EXAMINATIONS:	English		
IS THE COURSE OFFERED TO ERASMUS STUDENTS	Yes		
COURSE WEBSITE (URL)	https://www.soc.aegean.gr/ext-files/pm/mps/mmrfe-2022-183-2022-04-en.pdf		

(2) LEARNING OUTCOMES

<p>Learning outcomes <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"> • <i>Description of the level of learning outcomes for each qualifications cycle, according to the Qualifications Framework of the European Higher Education Area</i> • <i>Descriptors for Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning and Appendix B</i> • <i>Guidelines for writing Learning Outcomes</i>

Upon completion of their studies, students will acquire:

- Comprehensive knowledge of fundamental statistical methodologies and their application in social science research, particularly within the context of migration and refugee movements
- Ability to analyze and interpret both primary and secondary social data using theoretical and empirical frameworks, with a focus on statistical tools and techniques.
- Theoretical and empirical knowledge of analysis research methods to explore population dynamics, migration patterns, public health issues in contemporary global contexts.
- Skills of critical assessment on statistical models and data trends to inform policy decisions and contribute to research in migration, health, and social policy domains
- Experience in advanced IT tools and statistical software to process, analyze, and visualize complex datasets on the above issues.

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?

<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>

This course aims to equip students with the following key competences, as aligned with the degree program's broader objectives:

- Search for, analysis and synthesis of data and information, with the use of the necessary technology
- Decision-making
- Working independently
- Teamwork
- Working in an interdisciplinary environment
- Production of new research ideas
- Production of free, creative and inductive thinking

(3) SYLLABUS

This course begins with a focus on the development of core methodologies for designing, planning, and conducting statistical research, with a strong emphasis on the analysis of both primary and secondary social data. Students will explore key statistical techniques used to generate and analyze data, both theoretically and through practical application, utilizing advanced informatic tools to address social and demographic phenomena. Special attention will be given to predicting trends, correlating social variables, and investigating their causal relationships using

statistical models. The second component of the course introduces fundamental techniques in demographic and epidemiological research. These methods will be supplemented with real-world applications in the study of migration and refugee movements, a complex issue with significant socio-economic and demographic implications. Students will gain hands-on experience using statistical and informatic tools to analyze migration patterns and related public health challenges.

Course Syllabus:

1. “Research Methodology in Social Sciences”: Research design, principles of social science research, and the distinction between qualitative and quantitative methods
2. “Statistical Foundations for Social Research”: Introduction to key statistical concepts such as population, sampling, variables, and descriptive statistics.
3. “Research Design and Sampling Techniques”: hypothesis formulation, and sampling techniques, including probability and non-probability methods
4. “Applied Statistics in Social Research (Part I)”: inferential statistics, hypothesis testing, estimation, confidence intervals
5. “Applied Statistics in Social Research (Part II)”: bivariate analysis, correlation, simple linear regression, and interpreting relationships between social variables
6. “Applied Statistics in Social Research (Part III)”: multivariate analysis, cluster analysis, correspondence analysis, and PCA/Factor analysis for multidimensional research design
7. “Data Collection, Management, Visualization and Reporting Results”: collection and organization of datasets, coding, cleaning, visualizing statistical data using SPSS / Excel and reporting findings.
- 8.

(4) TEACHING and LEARNING METHODS - EVALUATION

<p style="text-align: center;">DELIVERY</p> <p><i>Face-to-face, Distance learning, etc.</i></p>	<p>The course is delivered either through distance learning or in-person lectures, incorporating interactive presentations and relevant visual materials to engage students. Throughout the course, students will be involved in preparing and presenting assignments, complemented by practical examples drawn from both global and Greek contexts. This approach ensures a deeper understanding of the course material by connecting theoretical concepts to real-world applications, enhancing students' ability to comprehend complex statistical, demographic, and migration-related phenomena.</p>
<p style="text-align: center;">USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</p> <p><i>Use of ICT in teaching, laboratory education, communication with students</i></p>	<ul style="list-style-type: none"> • Use of ICT in teaching • Laboratory education • Communication with students

<p>TEACHING METHODS <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.</i></p> <p><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></p>	Activity	Semester workload
	Lectures	50
	Field work	30
	Study & analysis of literature	50
	Laboratory lessons	49
	Writing a paper or conducting tests.	10
	Total	189
<p>STUDENT PERFORMANCE EVALUATION <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>Languages of evaluation: English/Greek</p> <p>Each student will be evaluated based on the following criteria:</p> <ol style="list-style-type: none"> a) General contribution and participation in the class b) Individual or group assignment c) Performance during the presentation of his/her assignment and/or d) Written exams in the form of a test. <p>The primary assessment criterion is the students' deep understanding of key concepts and methods, as well as their ability to apply them accurately and competently. The assessment criteria are provided to students during the first lecture and are clearly outlined in the course syllabus. All assignments, which may include essays, projects, or supplementary tasks, are assigned throughout the semester.</p>	

(5) ATTACHED BIBLIOGRAPHY

<p>Basic Books:</p> <p>Bartholomew, D. J. (2008). Analysis of Multivariate Social Science Data. CRC Press.</p> <p>Kaplan, D. (2004). The Sage handbook of quantitative methodology for the social sciences. sage.</p> <p>Wagner, W. E. III. (2019). Using IBM® SPSS® Statistics for Research Methods and Social Science Statistics. SAGE.</p> <p>Additional Bibliography:</p>

Field, A. (2018). *Discovering Statistics Using IBM SPSS Statistics*. SAGE Publications Ltd; Fifth edition ISBN: 978-152-641-195-21

Aschengrau A., Seage G-R. *Essentials of Epidemiology in Public Health*. Jones & Bartlett Learning; 4th edition (September 12, 2018). ISBN-13: 978-1284128352.

Clark G. M and Cooke D. (1998). "A Basic Course in Statistics", Arnold Pub., 4th ed EUROSTAT, "Migration Statistics" annual data, Luxembourg.

Hastie T., Tibshirani R., Friedman J., (2017). "The Elements of Statistical Learning-Data Mining, Inference, and Prediction", Second Edition, Springer Publications

Χατζηπαντελής, Θ. (2023), «Έλληνες πρόσφυγες: Γεωγραφία και εκλογική συμπεριφορά», Πρακτικά διεθνούς συνεδρίου «Η επόμενη μέρα μετά την Καταστροφή» 6-9 Οκτωβρίου 2022, Ιστορικό Αρχείο Προσφυγικού Ελληνισμού.

Ηλιάδου-Ταχάου, σ., Ανδρέου, Π.Α., Κασβίκης, Κ., Κασκαμανίδης Γ., Κιμουρτζής, Π., Κόκκινος, Γ. (Επιμ.) (2024), «Ο Προσφυγικός Κόσμος στην Ελλάδα Μετά τη Συνθήκη της Λωζάννης: Ιστορία, Πολιτισμός-Μνήμη, Εκπαίδευση», Εκδόσεις Ασίνη, Αθήνα.

Marangudakis, M., & Chatzipantelis, T. (2019). "The Greek Crisis and Its Cultural Origins". Palgrave Macmillan.

Nagopoulos N. and Rontos K. (2014). "The Determination of Social Integration of Migrants within the Framework of Employment Policy: The Case of Greece in Times of Crisis" in "The Debt Crisis in the Eurozone: Social Impacts", Ed. N. Petropoulos and G. Tsobanoglou, Cambridge Scholar Publishing.

Rontos K., Nagopoulos N. and Panagos N., (2019). "The refugee and Immigration Phenomenon in Lesvos (Greece) and the Attitudes of Local Community", Cambridge Scholars Publishing, U.K. Rothman K.J. "Epidemiology: An Introduction". Oxford University Press; 2nd edition (May 25, 2012). ISBN-13: 978-0199754557.

Siegel J. and Swanson D.A, (2004). "The Methods and Material of Demography", Elsevier