



UNIVERSITY OF NICOSIA ΠΑΝΕΠΙΣΤΗΜΙΟ ΛΕΥΚΩΣΙΑΣ

University of Nicosia, Cyprus

Course Code EDUS-206	Course Title Statistics in education	ECTS Credits 6
Department Paedagogical Studies	Semester Fall/ Spring	Prerequisites EDUS-204
Type of Course Required	Field Statistic	Language of Instruction Greek
Level of Course 1st Cycle	Year of Study 2 nd	Lecturer(s) Dr Elena Papanastasiou
Mode of Delivery face-to-face	Work Placement N/A	Co-requisites None

Objectives of the course:

The objectives of this course are to help students:

- comprehend and explain the terms used in educational statistics
- differentiate between the use of descriptive and inferential statistics
- examine various statistical analyses (measures of central tendency, measures of spread, and measures of association) and differentiate between the occasions in which they can be used
- analyze data with the use of the statistical package SPSS and explain the results
- evaluate the statistical results obtained from their own analyses and from published quantitative research studies

Learning outcomes:

With the completion of the course, students will be able to:

- Read and interpret the results of statistical analyses presented by others
- Distinguish between situations in which each type of statistical analysis should be used.
- Comprehend, analyze, and read critically published quantitative research studies.
- Analyze and interpret data with the use of SPSS

Course content:

1. Introduction to educational statistics (terms, concepts, etc)
2. Research questions and statistical hypotheses
3. Scales of measurement
4. Data management
5. The normal distribution
6. Descriptive statistics (measures of central tendency and measures of spread)
7. Inferential statistics (correlations, ANOVA)
8. Using SPSS and Excel

Learning activities and teaching methods:

Lecture, workshops, experiential seminars, individual and group work, individual feedback, case study analysis, student presentations

Assessment methods:

Formative assessment, feedback, individual research, collaborative work, presentations, discussions

Required textbooks/reading:

Authors	Title	Publisher	Year	ISBN
Παπαναστασίου, Κ. & Παπαναστασίου, Ε. Κ.	<i>Μεθοδολογία Εκπαιδευτικής Έρευνας</i>	Συγγραφέας	2005	978-0-07-110186-8

Shavelson, R. J. (1996). *Statistical reasoning for the behavioral sciences*. (3rd. ed.). Boston: McGraw Hill.