UNIVERSITY of NICOSIA

Course Syllabus

Course Code	Course Title	ECTS Credits
PSY-145	Research Methods & Statistics I	6
Prerequisites	**Department**	**Semester**
PSY-110, PSY-111	Social Sciences	Fall
Type of Course	**Field**	**Language of Instruction**
Required	Psychology	English
Level of Course	**Lecturer(s)**	**Year of Study**
1st Cycle	Dr Menelaos Apostolou	1st
Mode of Delivery	**Work Placement**	**Co-requisites**
Face-to-face	N/A	None

Course Objectives:

The main objectives of the course are to:

- Introduce students to the research methods employed in research in psychology.
- Provide students with the knowledge necessary for understanding and evaluating basic scientific research at least from a methods perspective.
- To introduce students to the principles of statistics that psychologists use in order to analyze data, giving emphasis to training in the usage of computerized statistical packages.

Learning Outcomes:

After completion of the course students are expected to be able to:

1. Demonstrate knowledge of research design and statistical concepts and methods relevant to psychological research. In particular, students are expected to develop an understanding of the different research methods available in psychology and be able to apply them in addressing specific research questions.
2. Demonstrate knowledge of basic statistical analysis techniques relevant to psychological research. In particular, students are expected to develop an understanding of why statistics

are necessary in research in psychology, and to demonstrate knowledge of basic statistical tools that psychologists employ for analyzing behavioral data.

3. Demonstrate knowledge of the main SPSS commands required for data analysis, including computing and recording variables, selecting cases, drawing charts and running basic inferential statistics.
4. Demonstrate knowledge of how to write a research report using the latest edition of the APA manual.

Course Content:

1. Introduction to research methods in psychology
2. Introduction to qualitative research methods
3. Open-ended questionnaires, interviews, observation, case studies
4. Qualitative data analysis
5. Introduction to quantitative research
6. Experimental design
7. Questionnaire design
8. Fundamental principles of statistics
9. Key principles such as sampling, randomization, null hypothesis, probability theory, and decision making; descriptive statistical methods; type I and type II errors
10. Exploring Differences between variables
11. Independent-samples t-test
12. Paired-samples t-test
13. Non-parametric tests (Man-Whitney U test, Wilcoxon signed rank test)

Learning Activities and Teaching Methods:

Interactive Lectures, Lab Presentations, Project, Lab Tutorials, Practical Exercises

Assessment Methods:

Project, Mid-Term Exam, Final Exam.

Required Textbooks / Readings:

Davis, D. F., & Smith, R. A. (2020). *An introduction to statistics and research methods: Becoming a psychological detective*. Pearson.

Recommended Textbooks / Readings:

Pallant, J. (2020). *SPSS survival manual* (7th ed.). Open University Press.