



Course Syllabus

Course Code	Course Title	ECTS Credits
PSYD-230	Research Methods and Statistics	10
Prerequisites	Department	Semester
PSYD-100	Social Sciences	Spring
Type of Course	Field	Language of Instruction
Compulsory	Psychology	English
Level of Course	Lecturer(s)	Year of Study
1 st Cycle	Menelaos Apostolou	2 nd
Mode of Delivery	Work Placement	Corequisites
Distance Learning	None	None

Course Objectives:

The main objectives of the course are to:

- Provide psychology students with an overview on the “scientific method” of research. It is an introduction on how to do quality research in psychology. By definition it also assists students in developing skills in analyzing the research work of others.
- Introduce students to the basic statistical skills for the analysis of data obtained in psychological research. The course incorporates descriptive statistics (techniques of summarizing or describing research findings) as well as inferential statistics (techniques for making predictions about general populations based on the findings from specific samples).

Learning Outcomes:

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

- Demonstrate an understanding of what research method types are available to undertake research
- Identify what makes a research topic “important”
- Demonstrate an understanding of what is the role of theory in research
- Identify theory relevant to an important research question
- Demonstrate an understanding of how to develop a testable research question from an important topic
- Explain what makes research “valid” or “invalid”
- Explain what are the various threats to research validity

- Demonstrate an understanding of how can threats to validity can be controlled
- Explain what assists in making research “reliable” or “unreliable”
- Explain what is research design and why is it so important to research
- Explain how to choose between alternative possible research designs
- Calculate descriptive statistics
- Calculate correlation
- Calculate Chi-Square for Tests of Goodness of Fit and Tests of Independence
- Contrast t-tests with the non-parametric alternatives
- Calculate one-way and two-way ANOVA and the non-parametric alternatives
- Calculate regression and multiple regression
- Develop statistical skills using SPSS
- Be able to write a research report in APA style

Course Content:

1. Introduction to Research Methods and Statistics
2. Ethics in Research
3. Collecting and Analyzing Qualitative Data
4. Collecting Quantitative Data-Experimental and Correlational Studies
5. Collecting Quantitative Data- Questionnaires
6. Introduction to Hypothesis Testing
7. Descriptive Statistics and introduction to the t-test
8. The t-test and the Equivalent Non-Parametric
9. The one-way ANOVA
10. The Factorial ANOVA
11. Pearson’s and Spearman’s Correlation
12. Introduction to Regression
13. How to Write a Research Report

Learning Activities and Teaching Methods:

Presentations, Assignments, Discussion forums, Videos, Practical Exercises

Assessment Methods:

Quizzes, Homework Assignments, Papers, Final examination

Required Textbooks / Readings:

Title	Author(s)	Publisher	Year	ISBN
The Psychologists as Detectives	Smith, R.A. & Davis, S.F.	Pearson	2012	ISBN-10: 0205859070/ISBN-13: 978-0205859078

Recommended Textbooks / Reading:

Title	Author(s)	Publisher	Year	ISBN
SPSS Survival Manual	Pallant, J.	Open University Press	2016	ISBN-10: 033526154/ISBN-13: 978-0335261543
Publication Manual of the American Psychological Association	American Psychological Association	American Psychological Association	2009	ISBN-10: 1433950618/ISBN-13: 978-1433805615