



### Course Outline

<b>Course Code</b>	<b>Course Title</b>	<b>ECTS Credits</b>
PSYC-511	Advanced Statistics and Research Methods I	7.5
<b>Prerequisites</b>	<b>Department</b>	<b>Semester</b>
None	Social Sciences	Fall
<b>Type of Course</b>	<b>Field</b>	<b>Language of Instruction</b>
Required	Clinical/Counseling Psychology	English
<b>Level of Course</b>	<b>Lecturer(s)</b>	<b>Year of Study</b>
2 <sup>nd</sup> Cycle	Dr Menelaos Apostolou	1 <sup>st</sup>
<b>Mode of Delivery</b>	<b>Work Placement</b>	<b>Corequisites</b>
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 clinical/ counseling psychology.
- To critically different quantitative and qualitative methodologies for data collection, such as experiments, surveys, observations, interviews, focus groups, ethnographic research, and case studies
- To develop the necessary skills for applying proper statistical procedures in analyzing behavioral data.
- To develop the skills required for the written presentation of findings from quantitative and qualitative data analysis
- To enhance the capacity of students to comprehend and critically evaluate published research reports.

#### Learning Outcomes:

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

1. Design a research study, as well as collect, organize and analyze the data
2. Critically assess quantitative and qualitative methods in clinical/counseling psychology
3. Discuss research relevant topics, such as threats to validity
4. Recognize the importance of ethical issues and taking them into account when designing

- and implementing a research project
5. Demonstrate understanding of the various quantitative and qualitative methodologies
  6. Demonstrate understanding of quantitative and qualitative data analysis methods
  7. Prepare a quantitative or qualitative research reports
  8. Demonstrate practical knowledge in data analysis and writing research findings in an academic format

### Course Content:

Introduction to Statistical Methods in Psychology  
 Fundamental Principles of Statistics  
 Key principles such as sampling, randomization, null hypothesis, probability theory, and decision making; descriptive statistical methods; type I and type II errors  
 Assessing Group Differences  
 Chi-Square test, standard one-way ANOVA and factorial ANOVA; post hoc comparisons and linear contrasts.  
 Assessing Changes overtime  
 Paired samples t-tests, repeated measures ANOVA and Chi-Square  
 Correlation  
 Regression

### Learning Activities and Teaching Methods:

Interactive Lectures, Lab Presentations, Lab Tutorials, Practical Exercises

### Assessment Methods:

Project, mid-term exam, final exam.

### Required Textbooks / Readings:

Title	Author(s)	Publisher	Year	ISBN
Field, A.	Discovering Statistics Using SPSS (4 <sup>th</sup> ed.)	SAGE	2013	978-1446249185
Smith, R. A. & Davis, S. F.	The Psychologists as detective 5 <sup>th</sup> edition	Pearson	2010	0-13-227731-X

Barker, C. Pistrang, N. Elliott, R.	<i>Research Methods in Clinical Psychology: An introduction for students and practitioners</i>	Wiley Blackwell	2016 3 <sup>rd</sup> Ed	E-Book available
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**Recommended Textbooks / Readings:**

<b>Title</b>	<b>Author(s)</b>	<b>Publisher</b>	<b>Year</b>	<b>ISBN</b>
American Psychological Association	Publication Manual of the American Psychological Association (6 <sup>th</sup> Edition)	American Psychological Association	2009	978- 1433805615