



## Course Syllabus

<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	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:

This is the first course in a sequence of four courses leading up to the completion of the required Thesis project. The main objectives of the course are to:

- Introduce students to the research methods employed in research in clinical/ counseling psychology.
- To critically evaluate 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.
- To prepare students for the research design, data collection, and analysis of results of their Thesis project.

**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 quantitative or qualitative research reports.
8. Demonstrate practical knowledge in data analysis and writing research findings in an academic format.

**Course Content:**

- Introduction to research in psychology
- Qualitative research methods: In-depth interview, observation
- Qualitative research methods: Open-ended questionnaires, case-studies, unobtrusive data
- Qualitative data analysis
- Quantitative research methods: Experimental design, questionnaire design
- 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
- Paired-samples t-test, independent samples t-test
- Mann-Whitney U test, Wilcoxon signed-rank test
- Chi-Square test
- 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:**

<b>Title</b>	<b>Author(s)</b>	<b>Publisher</b>	<b>Year</b>	<b>ISBN</b>
The psychologist as detective	Smith, R. A., & Davis, S. F.	Pearson	2012 (6th Ed.)	978-0205859078
Discovering statistics using SPSS	Field, A.	Sage	2017 (5th Ed.)	9781526445780

**Recommended Textbooks / Readings:**

<b>Title</b>	<b>Author(s)</b>	<b>Publisher</b>	<b>Year</b>	<b>ISBN</b>
Publication Manual of the American Psychological Association	American Psychological Association	American Psychological Association	2019) (7th Ed.)	978-1433832178
Research Methods in Clinical Psychology: An introduction for students and practitioners	Barker, C., Pistrang, N. & Elliott, R.	Wiley Blackwell	2016	978-1-118-77320-8
Qualitative Research Methods	Hennink, M., Hutter, I. & Bailey, A.	Sage	2020 (2nd Ed.)	978-1473903906