

## SYLLABUS

<b>TITLE:</b>	Correlational and Experimental Research Methods
<b>CODE:</b>	PSI 425
<b>PREREQUISITE:</b>	Last year of studies
<b>CREDITS:</b>	3 credits   45 contact hours   1 term

### DESCRIPTION

This course fosters the theoretical discussion of the assumptions of science, its research, and contemporary polemics. Likewise, it involves an approach to the theoretical field of Psychology and its research. The course also assumes a critical perspective on the work of science and the multiplicity of its explanations.

### JUSTIFICATION

Human beings have historically tried to explain and order (understand the term in its broadest sense) the environment that surrounds them. Scientific research "orders" knowledge and helps signify future events. From this perspective, they provide a scheme to understand ourselves and the set of circumstances and/or conditions in which we live. Therefore, every student interested in the theoretical field of Psychology should know these fundamentals- basic principles to make the best use of them.

### COMPETENCES

The course develops the following competences in students:

- **Research and exploration**
- **Communication**

### OBJECTIVES

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

1. Know the fundamentals of science and research.
2. Recognize the research process.

3. Critically analyze scientific research on human behavior.
4. Understand the role of methods and techniques in the abstraction process in Psychology.
5. Identify basic research designs in Psychology.
6. Write a research proposal.
7. Conduct a supervised investigation.

## **CONTENTS**

- I. Science and research
  - A. Scientific research as a process of inquiry and construction of an explanation
  - B. The fundamental role of theory in research
  - C. The construction of the scientific object in Psychology
- II. The research process
  - A. The formulation of research problems and the function of the hypothesis
  - B. Theoretical construction and assumptions
    1. Theoretical models
  - C. Control techniques
    1. Extraneous variables
  - D. Instruments, equipment, and other tools
- III. The basic research designs in Psychology: causal and correlational, among others
  - A. Corresponding statistical analyses
    1. T test
    2. Pearson correlation
  - B. Probability theory
    1. Concept of normality

## **METHODOLOGY**

The following strategies from the active learning methodology are recommended:

- Conferences
- Individual and group discussions
- Practical and statistical exercises

## EVALUATION

Compositions	25%
Practical work	30%
Participation	15%
Final project or exam	<u>30%</u>
<b>TOTAL</b>	100%

## LEARNING ASSESSMENT

The institutional assessment rubric is applied to the course's core activity.

## BIBLIOGRAPHY

American Psychological Association. (2020). *Publication Manual of the American*

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Aron, A., Aron, E. N. (1997). *Statistics for the Behavior and Social Sciences: A Brief Course*. Prentice Hall.

Cohen, N. & Gómez, G. (2019). *Metodología de investigación, ¿para qué? La producción de los datos y diseños*. Editorial Teseo.

Hernández Sampieri, R., Mendoza Torres, C. P. (2014). *Metodología de la investigación: las rutas cualitativa, cuantitativa y mixta*. (6<sup>th</sup> ed.). McGraw Hill Interamericana.

Junta Examinadora de Psicólogos de Puerto Rico. (1992). *Reglamento y código de ética de la Junta Examinadora de Psicólogos de Puerto Rico*. Junta Examinadora de Psicólogos de Puerto Rico.

Kantowitz, B., Roediger, H. & Elmo, D. (2014). *Experimental Psychology*. (10<sup>th</sup> ed.). Cengage Learning. SAGE.

Mac Bride, D. M. (2019). *The Process of Research in Psychology*. Sage Publications.

Mertens, D. M. (2005). *Research and Evaluation in Education and Psychology* (2<sup>nd</sup> ed.).

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Myers, A., Hansen, C. (2011). *Experimental Psychology* (7<sup>th</sup> ed.). Cengage Learning.

Morling, B. (2017). *Methods in Psychology* (3<sup>rd</sup> ed.). WW Norton & Company.

Otto, Z. (1992). *Psicología Experimental*. McGraw Hill.

Perezcoffie, J. (2002). *Psicología Experimental*. Publicaciones Gaviota.

Piscoya Hernández. L. (1987). *Investigación científica y educacional. Un enfoque epistemológico*. Amaru Editores.

Shaughnessy, J. Zechmeister, E. & Zechmeister, J. (2014). *Research Methods in Psychology*. (10<sup>th</sup> ed.). McGraw Hill.

Vélez, Luz M. (1991) Elementos que deben examinarse cuando se realiza una investigación. Monografía no publicada.

Vélez, Luz M. (1991) Reflexiones en torno a la investigación psicológica contemporánea. Monografía no publicada.

Vélez, Luz M. (1991) La constitución discursiva del sujeto: un análisis psicológico. Monografía no publicada.

Zechmeister, E. B., Posavac, E. J. (2003). *Data Analysis and interpretation on the behavioral sciences*. Wadsworth/Thomson Learning.

For more information resources related to the course's topics, access the library's webpage <http://biblioteca.sagrado.edu/>

## **REASONABLE ACCOMMODATION**

For detailed information on the process and required documentation you should visit the corresponding office. To ensure equal conditions, in compliance with the ADA Act (1990) and the Rehabilitation Act (1973), as amended, any student in need of reasonable

accommodation or special assistance must complete the process established by the Vice Presidency for Academic Affairs.

### **ACADEMIC HONESTY, FRAUD, AND PLAGIARISM**

Any student who fails to comply with the Honesty, Fraud, and Plagiarism Policy is exposed to the following sanctions: receive a zero in the evaluation and/or repetition of the assignment, an F(\*) in the course, suspension, or expulsion as established in the document *Política de Honestidad Académica* (DAEE 205-001) effective in August 2005.

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