

FICHA TÉCNICA DE LA ASIGNATURA

Datos de la asignatura	
Nombre completo	Research Methods
Código	E000012237
Cuatrimestre	Semestral
Créditos	6,0 ECTS
Carácter	Optativa
Departamento / Área	Departamento de Psicología
Responsable	David Paniagua Sánchez
Horario	Professors/Lecturers David Paniagua Sánchez
Horario de tutorías	Mon: 10:40-12:30 and Thu: 12:40 -14:30
Descriptor	Statistics is the science of data. It uses mathematical tools to collect, organize, process, and summarize data; make estimates using probability rules; and draw inferences that will affect decision-making in uncertain environments. In the professional profile of several graduates, this course has an instrumental character. It aims to introduce the student to the different phases of the research process in the context of social and health sciences, therefore, in the research methodology; in its different designs, in the construction of quantitative information, collection instruments, and in the organization and analysis of this information. The objectives of this subject are fundamentally focused on the understanding of concepts, on the decision making, in the choice of procedures and in the analysis of information.

Datos del profesorado	
Profesor	
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Departamento / Área	Departamento de Psicología
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DATOS ESPECÍFICOS DE LA ASIGNATURA

Contextualización de la asignatura
Competencias - Objetivos

BLOQUES TEMÁTICOS Y CONTENIDOS

Contenidos – Bloques Temáticos
Theme 1: Methods
Topic 1: Designs
1.1 Variables

1.2 Designs

1.3 Sampling

Theme 2: Descriptive Statistics

Topic 1: Descriptive analysis

1.1 Mean

1.2 Standard deviation

1.3 Kurtosis and Skewness

Topic 2: Graphics

2.1 Tables

2.2 Charts

Theme 2: Inferencial analysis

Topic 1: Central Limit Theory

1.1 Central Limit Theory

1.2 Hypothesis test

1.3 p -value

Topic 2: Inferential test

2.1 One mean test

2.2 t – test for two related / unrelated samples

2.3 Correlation

2.4 Chi-Squared

2.5 One-way ANOVA

METODOLOGÍA DOCENTE

Aspectos metodológicos generales de la asignatura

In Class Learning Techniques: Activities

Theoretical sessions will be delivered using Power Point presentations and focus on discussing the basic concepts underlying statistical theories along with various examples.

In these sessions, students will also work in small groups to solve exercises and quizzes to consolidate the acquired knowledge. There will be also two review sessions, that will be used to go over material delivered during the theoretical



sessions.

During the practical sessions, students will be using JAMOVI to do some tasks. They will work in different problem sets.

Independent Learning Techniques: Activities

- Realization of practices and resolution of exercises.
- Reading and understanding notes and manuals.
- Search and analysis of information

RESUMEN HORAS DE TRABAJO DEL ALUMNO

HORAS PRESENCIALES			
Theory Classes	Practical Classes	Academically Guided Activities	Assessments
48	18	10	4
HORAS NO PRESENCIALES			
Self-study of Theoretical Content	Self-study of Practical Content	Group Work Exercises	Revision
40	30	20	10
ECTS CREDITS			6.0 (180 Hours)

EVALUACIÓN Y CRITERIOS DE CALIFICACIÓN

Assessment Activities	Criterion	Weighting
A partial theoretical release test will be held		



at the first call (November). - With less than 5 in the practical part of the exams and less than 5 in the multiple choice part (theory), the student will appear as failed. Will only calculate overall average criterion test score when in all theoretical parts (test type) have at least a 5 and in the practical parts of both partial obtain a grade equal to or greater than 5. - It is necessary to have a minimum overall grade of 5 in the evaluation criterion "exams" to be able to calculate the global mark of the subject. With Less than 5 in this rating criterion the student will appear as failed in the note end of subject.	- Understanding of concepts. - Application of concepts and techniques. - Interpretation of information.	60
Several non-mandatory activities will be held during classes. The aim of those tasks is to put into test both: theoretical and practical learning	- Understanding of concepts. - Application of concepts and techniques. - Interpretation of information.	40

BIBLIOGRAFÍA Y RECURSOS

Bibliografía Básica

Field, A. (2013). Discovering statistics using IBM SPSS statistics. Sage

Bibliografía Complementaria

León, O. & Montero, I. (2015). Métodos de investigación en psicología y educación: las tradiciones cuantitativa y cualitativa (4^a Ed). McGrawHill

Morales Vallejo, P. (2008). Estadística aplicada a las ciencias sociales. Universidad Comillas.

Pardo, A., Ruíz M. A., & San Martín, R. (2009). Análisis de datos I en Ciencias Sociales y de la Salud. Síntesis

Field, A., Miles, J., & Field, Z. (2012). Discovering statistics using R. Sage.

Montero, I. & León, O. (2007). A guide for naming research studies in Psychology. International Journal of Clinical and Health

Psychology, 7(3), 847-862.

Morales Vallejo, P. (2000). Medición de actitudes en Psicología y Educación. Publicaciones de la Universidad Pontificia Comillas.

Morales, P., Urosa, B., & Blanco, A. (2003). Construcción de escalas de actitudes tipo Likert. La Muralla.

Fink, A. (2014). Conducting research literature reviews: from the internet to the paper. Sage Publications.

Hamui-Sutton, A., & Varela-Ruiz, M. (2013). La técnica de grupos focales. Universidad Nacional Autónoma de México. [https://10.1016/s2007-5057\(13\)72683-8](https://10.1016/s2007-5057(13)72683-8)

Kawulich, B. (2015). La observación participante como método de recolección de datos. FORUM: Qualitative social research. 6(2). <http://www.qualitative-research.net/fqs/>

León, O. G. (2016). Como redactar textos científicos (4^a Ed). Garceta, Grupo Editorial.

Meyer, D. K., & Schutz, P. A. (2020). Why talk about qualitative and mixed methods in educational psychology? Introduction to special issue. Educational Psychologist, 55(4), 193-196. <https://10.1080/00461520.2020.1796671>