

#### Información del Plan Docente

Academic Year 2016/17

Academic center 301 - Facultad de Ciencias Sociales y Humanas

**Degree** 270 - Degree in Psychology

ECTS 6.0
Course 1

Period First Four-month period

Subject Type Basic Education

Module ---

- 1.Basic info
- 1.1.Recommendations to take this course
- 1.2. Activities and key dates for the course
- 2.Initiation
- 2.1.Learning outcomes that define the subject
- 2.2.Introduction
- 3.Context and competences
- 3.1.Goals
- 3.2. Context and meaning of the subject in the degree
- 3.3.Competences
- 3.4.Importance of learning outcomes
- 4.Evaluation
- 5. Activities and resources
- 5.1.General methodological presentation
- 5.2.Learning activities
- 5.3.Program
- A. RESEARCH METHODS AND DESIGNS IN PSYCHOLOGY
- 1. Psychology, science and scientific method



2. The problem
3. The hypothesis
4. The variables
5. Participant, sampling and randomization
6. Research design
7. Essential aspects of experimental methodology
1. Concept of experiment
2. Targets of experiment
3. MAX-MIN-CON principle
4. Causal inference as object
5. The problem of confounding
8. Concept and categorization of validity
1. The concept of validity
2. Categorization of validity from different perspectives
3. Internal validity
4. External validity
5. Construct validity
6. Statistical validity
9. Scientific report



#### **B. STATISTIC APPLIED TO PSYCHOLOGY**

1. Univariate descriptive statistics

1. Frequency distribution

1. Organization y representation of data

2. Graphical representations
1. Graphic representations of common use
2. Stem and leaf plot
2. Measures of position
1. Centiles o percentiles
2. Deciles
3. Other quantiles
1. Deciles
2. Quartiles
3. Equivalence between quantiles
3. Measures of central tendency
1. Arithmetic mean
1. Calculation in frecuency distribution
2. Properties of arithmetic mean
2. Median
3. Mode
4. Comparison between measures of central tendency



4. Measures of variation

1. Measures of variation

1. Variance and standard deviation

## 25906 - Research Methodology I

2. Calculation and properties of variance
3. Other measures of variation
2. Graphical representations of variation
5. Standard punctuation and derivative scales
1. Standard punctuation
2. Derivative scales
6. Measures of asymmetry and kurtosis
1. Measures of asymmetry
2. Measures of kurtosis
2. Multivariate descriptive statistics
<ul><li>2. Multivariate descriptive statistics</li><li>1. Lineal correlation</li></ul>
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1. Lineal correlation
<ol> <li>Lineal correlation</li> <li>Graphical representations of a relation</li> </ol>
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- 2. Simple regression
- 1. Identification of a model: equations
- 2. Assessment of the model: regression coefficient
- 3. Application of the model
- 4. Some considerations about regression
- 5.4. Planning and scheduling
- 5.5.Bibliography and recomended resources