Universidad Zaragoza

Academic Year/course: 2024/25

31225 - Psychometrics

Syllabus Information

Academic year: 2024/25
Subject: 31225 - Psychometrics
Faculty / School: 301 - Facultad de Ciencias Sociales y Humanas
Degree: 613 - Degree in Psychology
ECTS: 6.0
Year: 3
Semester: Second semester
Subject type: Compulsory
Module:

1. General information

The subject of Psychometry focuses on the study of psychological measurement, one of the pillars of knowledge and research in Psychology. The objective of the subject is not only to learn and apply models and procedures to measure psychological aspects, but also to develop critical thinking about what it means to measure, when it can be done and how it should be done correctly. The subject of Psychometrics seeks to examine and question the reality of psychometric application in the field of psychological measurement. The main objective is to know the limitations of the measuring instruments used in psychology and to ensure a responsible use in the different professional areas.

2. Learning results

Upon completion of the subject, the student will be able to:

- Know and assess the suitability of the process of construction and/or adaptation of a test.
- Analyse and properly interpret the psychometric properties of a test.
- Make appropriate inferences from the scores obtained after the application of the test.
- Make decisions based on psychometric knowledge for the choice of measurement tools.

3. Syllabus

- Didactic unit 1. Historical and conceptual delimitation of psychometrics
- Didactic unit 2. Definition and classification of tests, the process of psychometric inference, problems in the measurement of psychological attributes, stages in the construction of tests
- Didactic unit 3: Historical evolution of the concept of validity, recent conceptions of validity, and evidence of validity
- Didactic unit 4: Accuracy of measures from psychological tests, classical test theory and introduction to item response theory

4. Academic activities

This subject comprises several academic activities focused mainly on presenting and deepening the theoretical and applied concepts of psychometrics, consolidating the contents of the subject, as well as learning to use statistical software for the analysis of psychometric properties. In particular:

- Explanatory classes
- Practical activities with statistical software
- Guided academic activities
- Tutorials
- Assessment

5. Assessment system

The continuous assessment of the subject consists of two parts:

- **Final test**(60% of the final grade): The theoretical and applied contents developed in the subject will be evaluated.

Multiple choice and/or short answer questions may be included.

- **Weekly deliveries and evaluable activities** (40% of the final grade): The practical contents of the subject will be evaluated (e.g., critical review of research articles, applied questions related to research projects , use of statistical software and result acquisition and interpreting, etc.).

The evaluation criteria for this subject are based on the adequacy of the use and mastery of statistical software for psychometric analysis, ability to interpret results (value of statistics, tables, graphs, etc.), recognize and critically analyse information about the application of psychometrics in psychology (e.g., test construction, psychometric models, psychometric properties, etc.).

Students must achieve at least half of the maximum possible grade in each of the parts in order to add them together. Likewise, students are entitled to a global evaluation on all the contents of the subject. In this global evaluation, students are eligible for the maximum grade (100% of the final grade). This evaluation will take place in the official final call for exams and consists of a written test with multiple choice and/or short answer questions that refer to the theoretical and practical-applied contents of the subject.

6. Sustainable Development Goals

4 - Quality Education
8 - Decent Work and Economic Growth
9 - Industry, Innovation and Infrastructure