

**COURSE DATA****Data Subject**

<b>Code</b>	33337
<b>Name</b>	Measuring instruments in educational contexts
<b>Cycle</b>	Grade
<b>ECTS Credits</b>	4.5
<b>Academic year</b>	2022 - 2023

**Study (s)**

<b>Degree</b>	<b>Center</b>	<b>Acad. year</b>	<b>Period</b>
1319 - Degree in Psychology	Faculty of Psychology and Speech Therapy	4	First term

**Subject-matter**

<b>Degree</b>	<b>Subject-matter</b>	<b>Character</b>
1319 - Degree in Psychology	36 - Measuring instruments in educational contexts	Optional

**Coordination**

<b>Name</b>	<b>Department</b>
PERIS DELCAMPO, DAVID	267 - Behavioral Sciences Methodology

**SUMMARY**

"Measuring instruments in educational contexts" is an elective course that is taught twice a year in the first half of the 4 th year of the Degree in Psychology. Consists of 4.5 credits. This subject is intended that the student masters the basic aspects related to educational measurement by scales and tests: their characteristics, the basic methods of construction of scales and tests, the theories of the most important tests, assessing the quality of these measures and their interpretation.

The subject has a theoretical and practical, so that the theoretical components are added at a practical level, to be determined by the theoretical concepts.



## PREVIOUS KNOWLEDGE

### Relationship to other subjects of the same degree

There are no specified enrollment restrictions with other subjects of the curriculum.

### Other requirements

We recommend having passed the second year subject psychometrics.

## COMPETENCES (RD 1393/2007) // LEARNING OUTCOMES (RD 822/2021)

### 1319 - Degree in Psychology

- Be able to identify differences, problems and needs.
- Know and comply with professional ethics of Psychology.
- Know the methodology for designing performance tests.
- Be able to design and apply performance tests to solve the problems arising in professional practice.
- Be able to analyse data through statistical software and other information technologies.

## LEARNING OUTCOMES (RD 1393/2007) // NO CONTENT (RD 822/2021)

At the end of the course the student will know:

- What is it and how to carry out the construction process of measuring instruments in educational contexts.
- What is it and how to perform the analysis and evaluation of measuring instruments.
- What is it and how to carry out a proper use of measuring instruments.

## DESCRIPTION OF CONTENTS

### 1. Evaluation on knowledge and skills.

Introduction.

Objectives.

The measure of performance.

The evaluation process.



## **2. Criterion referended tests.**

Characteristics of the criterion-referenced tests.  
Differences related to testing standards.  
Stages in the construction of the criterion-referenced tests.

## **3. Analysis of the items on the criterion-referenced tests**

Contents analysis  
Statistical Analysis

## **4. Reliability of the criterion referended tests**

Reliability of domain scores  
Reliability of ratings

## **5. Validity in the criterion referended tests**

Determination of breakpoints.  
Methods based on the evaluation material  
Methods based on the performance of validation groups

## **6. Interpretation of results**

Interpretation of scores.  
Reporting and feedback.

## **7. Aplications.**

Item banks  
New Insights

**WORKLOAD**

ACTIVITY	Hours	% To be attended
Theoretical and practical classes	45,00	100
Development of group work	17,50	0
Preparation of evaluation activities	20,00	0
Preparing lectures	15,00	0
Preparation of practical classes and problem	15,00	0
<b>TOTAL</b>	<b>112,50</b>	

**TEACHING METHODOLOGY**

In the face basis theoretical activities will develop the themes of the course providing a global and inclusive vision, analyzing in detail the key issues and more complex, promoting at all times, student participation. These activities are complemented by practical activities in order to apply the basic concepts and extend them with knowledge and experience is acquired during the performance of the proposed work. They include the following types of classroom activities:

- Lectures and classroom issues.
- Sessions for discussion and resolution of problems and exercises.
- Practice with computer.
- Making individual evaluation questionnaires in the classroom.

In addition to classroom activities, students must perform personal tasks (outside the classroom) on: monographs, literature search conducted, issues and problems, and the preparation of classes and exams (study). These tasks will be mainly on an individual basis, in order to enhance self-employment, but further work will be included requiring the participation of small groups of students to build capacity for integration into working groups.

**EVALUATION**

The evaluation will result in a score of between 0 and 10 points. This rating is based on the evaluation of the following three sections both at first and second call:

**System of Evaluation 1 (ES1): ESTIMATION OF THEORETICAL AND PRACTICAL CONTENTS BY MEANS OF ORAL OR WRITTEN TESTS, AND SKILL PERFORMANCE.** It will represent 85% of the final qualification. It will consist of two sections: A) continuous evaluation during the scheduled period of classes, with a maximum of 15% and, B) final evaluation, with a maximum qualification of 70%, in which it will be necessary to achieve a minimum of 50% to pass the course both at first and second call. Both sections are recoverable in second call.



**System of Evaluation 2 (ES2):** ORAL OR WRITTEN PRESENTATION OF REPORTS ABOUT INDIVIDUAL OR GROUP WORKS, CLINICAL CASES, RESOLUTION OF PROBLEMS OR MANAGEMENT OF DIAGNOSTIC TESTS. It will add a maximum of 15% of the final qualification. It is necessary to achieve a minimum of 50% in this section to pass the course both at first and second call. This section is recoverable in second call.

Additional considerations:

1. The described sections will be added up only if the student reaches the minimum required conditions.
2. If a student do not pass some of the compulsory sections at the first call, the points of the other sections will be saved for the second call.
3. The dates to take the tests of Section A of the ES1 will be established by the teacher along the course. They can be individual or groupal evaluations about the topics included in the Syllabus (Guia Docent).
4. The qualification of the subject as well as the review of and appeal against the allotted grades will abide to what is stipulated in the *Reglament d'Avaluació i Qualificació de la Universitat de València per a títols de Grau i Màster* (ACGUV 108/2017 of May 30, 2017).  
[http://www.uv.es/graus/normatives/2017\\_108\\_reglament\\_avaluacio\\_qualificacio.pdf](http://www.uv.es/graus/normatives/2017_108_reglament_avaluacio_qualificacio.pdf)

In accordance with it, the following scale of grades will be used:

- Of 0 to 4.9: fail (D)
- Of 5 to 6.9: pass (C)
- Of 7 to 8.9: remarkable (B)
- Of 9 to 10: excellent (A) or First Honors (A+)

As stated in the normative about the attribution of First Honors gardes, it will follow a strict order of numerical mark. In case of a tie, the qualification will be granted to the student with the higher numerical score at Section B of the ES1. If the tie persists, the higher score at the ES2 and, finally the higher score at the Section A of the ES1 will apply. If all of them are identical, the teacher can ask for an additional test to be taken by the candidates.

5. The copy or plagiarism of any task of the evaluation will preclude the student from passing the course. Furthermore, the appropriate disciplinary measures may be applied.





6. Please be aware that, according to article 13.d) of the Statute of the University Student (RD 1791/2010, of 30 of December), a student must abstain to use or cooperate in fraudulent procedures in the tests of evaluation and works that they perform, or in official documents of the university.

In the event of fraudulent practices, the Action Protocol for fraudulent practices at the University of Valencia will be applied (ACGUV 123/2020): <https://www.uv.es/sgeneral/Protocols/C83sp.pdf>

7. In individual or group tutoring sessions, the professor can ask questions in order to verify the degree of participation and achievement of the objectives of a task. Not accepting this verification would preclude the student from passing the task or activity in question .

8. The marks reached in the first call will be incorporated to the official proceedings of the subject according to the following rules:

- If there is no qualification, the evaluation section with the highest weight, the grade will be Not Presented, regardless of the rest.
- If the score in the evaluation section with the highest weight does not reach the minimum requirements, FAIL shall be entered and the score (out of 10 points) shall be the qualification of this section.
- If the score at the evaluation section with the highest weight exceeds the minimum requirements, but there are no scores from one or more of the remaining sections, FAIL shall be entered and the numerical score (out of 10 points) will be entered.
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9. At the SECOND CALL, the following rules shall apply:

- The NOT PRESENTED grade will be consigned only when the student has not completed more than one of the assessment sections, including the one with the highest weighting.
- If there are grades for all the evaluation sections and minimum requirements have not been met in any of them, FAIL will be registered and the score (out of 10 points) pertaining to the failed section will be consigned. If more than one section is not passed, the maximum score achieved in one of them will be consigned, together with the grade FAIL.
- If one or more of the minimum requirements are not exceeded and an evaluation section is missing, SUSPENS will be recorded and a numerical note based on 10 of the grade of the section not passed.
- If two evaluation sections are passed and there is a third part in which no evidence of evaluation has been presented, FAIL will be consigned and, as a rating, the average score will be 0.0 for the part not submitted (maximum possible: 4.9 ).
- If the part of greater weight is passed, but evidences are missing in one or more of the remaining sections, FAIL will be consigned. The parts will be added: a) if the sum is less than 5.0, this result will be recorded; B) if the sum is higher than 5.0, 4.9 it will be consigned.



10. If the subject has been passed in the first call, the students will not be able to attend the second call with the purpose of improving their grades.

11. In order to challenge the allotted grades the provisions of the *Reglament d'Avaluació i Qualificació de la Universitat de València per a títols de Grau i Màster* (ACGUV 108/2017 of May 30, 2017) [http://www.uv.es/graus/normatives/2017\\_108\\_reglament\\_avaluacio\\_qualificacio.pdf](http://www.uv.es/graus/normatives/2017_108_reglament_avaluacio_qualificacio.pdf) will rule.

## REFERENCES

### Basic

- Martínez Arias, R. Hernández, M.J. y Hernández, M.V. (2006). *Psicometría*. Alianza Editorial.
- Mateo, J. y Martínez, F. (2008). *Medición y evaluación educativa*. Madrid. La Muralla.

### Additional

- Smith, E.V. and Stone, G.E. (2009). *Criterion referenced testing: practice analysis to score reporting using Rasch measurement models*. JAM Press.
- Shrock, S.A. & Coscarelli, W.C. (2007). *Criterion-Referenced Test Development: technical and legal guidelines for Corporate Training*. John Wiley & Sons.
- Berk, R.A. (1984). *A guide to criterion-referenced test construction*. Baltimore, MD: John Hopkins University Press.
- Keeves, J.P. 1997. *Educational research, methodology, and measurement: an international hadbook*. Cambridge, Pergamon.
- Hambleton, R K. and Simon, R.A. (1980). *Steps for Constructting Criterion-Referenced Test*. Laboratory of Psychometric and Evaluative research Report No. 104. Massacussets University