



Universitat de Lleida

DEGREE CURRICULUM
PSYCHOMETRICS

Coordination: MARCH LLANES, JAUME

Academic year 2020-21

Subject's general information

Subject name	PSYCHOMETRICS		
Code	102943		
Semester	2nd Q(SEMESTER) CONTINUED EVALUATION		
Typology	Degree	Course	Character
	Bachelor's Degree in Psychology	2	COMPULSORY
	Modality	Attendance-based	
Course number of credits (ECTS)	6		
Type of activity, credits, and groups	Activity type	PRAULA	TEORIA
	Number of credits	2.4	3.6
	Number of groups	2	1
Coordination	MARCH LLANES, JAUME		
Department	PSICOLOGIA		
Important information on data processing	Consult this link for more information.		

Teaching staff	E-mail addresses	Credits taught by teacher	Office and hour of attention
BLANCH PLANA, ANGEL	angel.blanch@udl.cat	2,8	
ESTRADA PLANA, VERÓNICA MARÍA	veronica.estrada@udl.cat	1,55	
MARCH LLANES, JAUME	jaume.march@udl.cat	4,05	

Learning objectives

Learning outcomes:

- Know the steps involved in the psychological assessment and the processes it encompasses.
- Know how to reason for the need to have psychometric scientific evidence about the measuring instruments that we can use for psychological evaluation.
- Distinguish between the typical instruments of measurement of the interview, the natural observation, the self-reports, the tests of other objective tests such as the neuropsychological ones.
- Know the role played by psychometry in the provision of evidence about the most used instruments in each field.
- Know the role psychometric plays in the provision of evidence about the most used instruments in program evaluation.
- Know the basics of measurement in psychology.
- Know how to create the type of items appropriate to the required information.
- Create a questionnaire using a computer assistant.
- Know the principles of the Classical theory of the tests and their implication in the concepts of reliability and validity.
- Know how to choose and calculate the most appropriate Indicators of Reliability depending on the specific case.
- Know how to choose and calculate the most appropriate indicators of validity depending on the specific case.
- Understand the basic reasoning of Theory of generalization.
- Understand the basic reasoning of the Theory of the Response to the item.

Competences

Basic skills:

CB1 Possess and understand knowledge in an area of study which is at the foundation of general secondary education, and is usually at a level which, while supported by advanced textbooks, also includes some aspects involving knowledge from the cutting edge of their field of study.

CB3 Ability to gather and interpret relevant data (usually within their area of study) in order to make judgements that include reflection on relevant social, scientific or ethical issues

CB4 Ability to convey information, ideas, problems and solutions to both specialized and non-specialized audiences.

CB5 To be able to develop those learning skills necessary to undertake further study with a high degree of autonomy

General Competencies:

CG1 Developing the ability to adapt to new situations and solve problems effectively.

CG5 Demonstrating critical ability to make relevant decisions.

CG6 Reflecting on one's own limitations in a self-critical manner, considering the possibility of requesting interdisciplinary collaboration.

CG7 Acting with creativity, research culture and professional communication.

CG8 Identify and evaluate own competencies, skills and knowledge according to the standards of the profession.

CG9 Recognising diversity and difference as a structural element of the human being, while recognising, understanding and respecting the cultural complexity of today's society.

Specific Competencies:

SG1 Identifying and analysing the characteristics and needs of individuals, groups and organisations, as well as the relevant contexts for the service being requested.

CE2 Planning the evaluation of programs and/or psychological interventions, selecting the appropriate indicators and techniques.

CE3 Apply the techniques for collecting information, obtaining relevant data for the evaluation of programs and/or psychological interventions.

SG4 Analyzing and interpreting the results of psychological evaluation.

CE5 Design and apply a psychological intervention strategy/plan, depending on the contexts or services demanded.

CE6 Respond and act in an appropriate and professional manner, taking into account the attitudes and values of the profession, as well as its code of ethics and deontology, in each and every one of the intervention processes.

CE7 Provide information to users and establish an adequate interpersonal relationship, taking into account the different contexts of professional relations.

CE8 To prepare technical reports, both oral and written, on the results of the evaluation process, of the research or of the services demanded, respecting the ethical commitment that the dissemination of psychological knowledge requires.

CE9 To use the different documentary sources in psychology, to show a mastery of the necessary strategies to access the information and to assess the need for documentary updating.

CE10 Manage, analyse and interpret data within the framework of the disciplinary knowledge of the different fields of psychology.

CE11 Make critical decisions on the choice, application and interpretation of the results derived from the different psychological research methods.

CE12 To disseminate the knowledge derived from theoretical reviews and from the results of psychological research.

Transversal competences:

CT1 Acquire adequate oral and written comprehension and expression of Catalan and Spanish.

CT3 To acquire training in the use of new technologies and information and communication technologies.

CT5 To acquire essential notions of scientific thought.

Subject contents

1. Psychological evaluation as a process.
2. The measure of constructs: How can we do it. Classical Theory of Tests.
3. Analysis of the items.

4. Arguments on the Reliability of a questionnaire.
5. Arguments on the Validity of a Questionnaire.
6. The measure of constructs according to the Theory of Generalizability.
7. Psychological evaluation: Normative interpretation.
8. The measure of constructs according to the Theory of the Response to the item.

Methodology

1. Master classes
2. Practical classes
3. Written works
4. Problem-based learning (PBL)
5. Flipped classroom

Development plan

Training activity	Hours devoted to the training activity (60/90) *		% attendance
Face-to-face theoretical classes	30	20	63%
Face-to-face practical classes	20	15	57%
Group exhibitions	5	5	50%
Tutorials	5	5	50%
Reading and analysis of texts	0	15	0%
Elaboration of group work	0	15	0%
Test preparation	0	15	0%
	60	90	100%

Evaluation

Assessment system week	% on grade	Teacher responsible
Practical test TCT 10	30	March / Estrada
Activities (3) 3-6-9	25	March / Estrada
Test contents TCT 10	15	March / Estrada
Practical tests TRI 15	15	Blanch
Test contents TG, TRI	15	Blanch

The approved is obtained exceeding 50% of the total mark, with the condition of exceeding 40% in the written tests that exceed 29% of the total grade.

Alternative evaluation:

The alternative assessment will be identical to the standard but the schedule of deliveries and tests will always be the S16-S17 assessment weeks.

It is essential to contact the coordinator teacher to establish a test schedule at the beginning of the course.

Bibliography

Recommended bibliography

- 1.- Elosua Oliden, Paula (2020). *Psicometría aplicada [Recurso electrónico]: guía para el análisis de datos y escalas con jamovi* Oliden. – Datos. – Bilbao: Euskal Herriko Unibertsitatea, Argitalpen Zerbitzua. Modo de acceso: World Wide Web ISBN: 978-84-1319-150-8.
- 2.- Muñiz Fernández José (2018) *Introducción a la Psicometría. Teoría clásica y TRI*. Ed. Piramide. I.S.B.N.: 978-84-368-3932-6, I.S.B.N. (pdf): 978-84-368-3933-3
- 3.- Abad, Olea, Ponsoda & García (2014) *Medición en ciencias sociales y de la salud* Sintesis Editorial. eISBN-13: 9788499586144; eISBN-10: 8499586147 000000000; Print ISBNs: PB: 9788499586144, 8497567277

Basical bibliography

- Gómez Benito, J. (1997). *Construcció d'instruments de mesura*. Barcelona: Edicions de la Universitat Oberta de Catalunya.
- Viladrich, M. C., Doval, E., Prat, R. i Vall-Ilovera, M. (2005). *Psicometria*. Barcelona: Edicions de la Universitat
- Gómez Benito, J., Però Cebollero, M., Carreras Archs, V. i Guilera Ferré, G. (2006). *Pràctiques de Psicometria amb SPSS*. Barcelona: Edicions UB.

complementary bibliography

Books

- Muñiz, J. (2000). *Teoría Clásica de los Tests*. Madrid: Pirámide.

Rust, J. & Golombock, S. (2008). *Modern psychometrics. The science of psychological assessment* (3rd edition). New York: Routledge.

Salvador, F. (1997). *Quantificació de les observacions: escales de mesura*. Barcelona: Edicions de la Universitat Oberta de Catalunya.

Urbina, S. (2007). *Claves para la evaluación con tests psicológicos*. Madrid: TEA.

Web

<http://www.apa.org/science/testing.html>

<http://www.intestcom.org/>

<http://www.hbtpc.com/>

<http://www.unl.edu/buros/>