

COURSE GUIDE

2024/25

Faculty231 - Faculty of Psychology

Cycle.

DegreeGLOGOP20 - Bachelor's Degree in Speech Therapy

YearFirst year

COURSE

28495 - Introduction to Scientific Methodology

Credits, ECTS:6

COURSE DESCRIPTION

'Introduction to scientific methodology' is a first-year subject of the Bachelor's Degree in Speech Therapy assigned to Methodology of Behavioural Sciences knowledge area. Together with 'Research methods and Data analysis in Speech Therapy' taught in the second year, students will gain competences related to scientific research.

This subject offers a comprehensive view of the fundamentals of the scientific method, the scientific research process and data analysis.

COMPETENCIES/LEARNING RESULTS FOR THE SUBJECT

Knowledge

RCO5. Understand the scientific foundations that support speech therapy and its evolution, critically assessing the terminology, clinical trials and methodology of research related to speech therapy.

RCO5.1. Know and integrate the methodological foundations for research in Speech Therapy.

Competencies

RC2. Be able to develop skills such as: problem solving, critical reasoning and adapting to new situations.

Theoretical and Practical Contents

1. The scientific method
2. The research process in speech therapy
3. Research methods in speech therapy
4. Descriptive analysis of data
5. Introduction to statistical inference

TEACHING METHODS

In order to cover the course syllabus, various teaching methodologies are used in this subject. Autonomous work will be promoted through the use of bibliographic resources that help students to understand the different aspects of the subject. Lectures will be given on the conceptual contents of the subject. In some practical classes, reflection and critical attitude will be encouraged, so that students acquire oral and written communication skills, as well as the ability to work in groups. In the classroom practices and workshops, problem-based learning activities and exercises will be provided to be developed individually or in groups, which will allow students to deepen their knowledge on the subject.

Feedback will be provided based on previously established evaluation criteria, so that students will have the opportunity to become aware of their learning, as well as ways to improve it.

TYPES OF TEACHING

Types of teaching	M	S	GA	GL	GO	GCL	TA	TI	GCA
Hours of face-to-face teaching	40		10				10		
Horas de Actividad No Presencial del Alumno/a	60		15				15		

Legend: M: Lecture-basedS: SeminarGA: Applied classroom-based groupsGL: Applied laboratory-based groupsGO: Applied computer-based groupsGCL: Applied clinical-based groupsTA: WorkshopTI: Industrial workshopGCA: Applied fieldwork groups

Evaluation methods

- Continuous evaluation
- End-of-course evaluation

Evaluation tools and percentages of final mark

- Multiple choice test60%



- Individual assignments 10%
- Teamwork assignments (problem solving, Project design) 30%

ORDINARY EXAMINATION PERIOD: GUIDELINES AND OPTING OUT

Two evaluation types are proposed:

CONTINUOUS EVALUATION

Theoretical contents of the subject will be evaluated by a multiple-choice exam that will account for 60% of the final grade. The evaluation of the practical contents of the course will represent 40% of the remaining grade (30% group activities, 10% individual activities).

FINAL EVALUATION

Students who have not followed the continuous evaluation or have not passed the practical part, will take a theoretical test exam that will account for 60% of the final grade and a practical exam that will account for the remaining 40%.

In both modalities (continuous evaluation and final evaluation) you must pass both parts (theoretical part and practical part) in order to pass the subject.

OPTING OUT

It will be sufficient not to attend the exam call. No written request or permission from the teacher is needed in advanced.

EXTRAORDINARY EXAMINATION PERIOD: GUIDELINES AND OPTING OUT

In the extraordinary examination period the same evaluation criteria will be followed as for those students who take the final evaluation (100% of the grade):

1. Theoretical test exam (60%).
2. Practical exam (40%).

For opting out, it will be sufficient not to attend the exam call. No written request or permission from the teacher is needed in advanced.

MANDATORY MATERIALS

Compulsory materials will available to students on the e-Gela platform.

BIBLIOGRAPHY

Basic bibliography

Botella, J. (2004). Análisis de datos en Psicología I: Teoría y ejercicios. Pirámide.

Camacho, J., Ramírez-Santana, G.M., Betancort, M., Hess, S., & Hernández, J.A. (2015). Fundamentos de metodología I en Psicología y Logopedia. Drago

Castellanos López, M. A., Pérez Moreno, E., & Simón López, T (2018). Métodos de investigación en logopedia. Síntesis.

Cubo, S., Martín, B., & Ramos, J.L. (2011). Métodos de investigación y análisis de datos en ciencias sociales y de la salud. Pirámide.

Irwin, D.L., Pannbaker, M., & Lass, N. J. (2013). Clinical Research Methods in Speech-Language Pathology and Audiology. Plural Publishing.

Martín, Q. (2001). Contrastes de hipótesis. La Muralla.

Pardo, A., Ruiz, M.A., & San Martin, R. (2009). Análisis de datos en ciencias sociales y de la salud I. Síntesis.

Ramos, M.M., Catena, A., & Trujillo, H.M. (2004). Manual de métodos y técnicas de investigación en ciencias del comportamiento. Biblioteca Nueva.

Tomeo, V. & Uña, I. (2009). Estadística descriptiva. Garceta.

Detailed bibliography

Anguera, M.T., Arnau, J., Ato, M., Martínez, R., Pascual, J., & Vallejo, G. (1995). Métodos de investigación en Psicología. Síntesis.

Ato, M. (1991). Investigación en Ciencias del Comportamiento I. Fundamentos. PPU.

Hernández, R., Fernández-Collado, C., & Baptista, P. (2010). Fundamentos de metodología de la investigación. McGraw Hill.

Moreno, R., Martínez, R.J., & Chacón, S. (2000). Fundamentos metodológicos en psicología y ciencias afines. Pirámide.

Peralta, M.J. Rúa, A., Redondo, R., & Campo, C. (2007). Estadística: Problemas resueltos. Pirámide.

Ritchey, F.J. (2008). Estadística para las ciencias sociales. McGraw Hill.

Seisdedos, A. (1994). Problemas de estadística aplicada a las ciencias sociales. Amaru.

Solanas, A., Salafranca, L., Fauquet, J., & Núñez, M.I. (2005). Estadística descriptiva en Ciencias del Comportamiento. Thomson

Journals

JCR (2022) Top journals on Audiology & Speech-Language Pathology:

- American Journal of Speech-Language Pathology
- Journal of Speech-Language and hearing research
- Brain and Language
- International Journal of Language & Communication Disorders

Other resources:

- Methodology - European Journal of Research Methods for the Behavioral and Social Sciences.
- Revista de Investigación en Logopedia.

Web sites of interest

Introducción a la Investigación en Logopedia (Universitat Oberta de Catalunya):
https://openaccess.uoc.edu/bitstream/10609/147059/3/BasesParaLaInvestigacionEnCienciasDeLaSalud_IntroduccionALaInvestigacionEnLogopedia.pdf

AELFA. Portal de la Asociación Española de Logopedia, Foniatría y Audiología. <http://www.aelfa.org>

ALE. Asociación de Logopedas de España. <https://www.ale-logopedas.org>

Cochrane Library. <https://www.cochranelibrary.com/cdsr/reviews>

NICE guidelines and resources. <https://www.nice.org.uk>

[Software for data analysis] JAMOVI: <https://www.jamovi.org/>

OBSERVATIONS