

COURSE GUIDE

RESEARCH METHODS IN PSYCHOLOGY

**Bachelor's Degree in Psychology
C.U. Cardenal Cisneros
Universidad de Alcalá**

Academic Year 2026/2027

1st year – 1st semester

COURSE GUIDE

Course Title:	Research Methods in Psychology
Code:	562004
Degree Programme:	Bachelor's Degree in Psychology
Department and Knowledge Area:	Education and Psychology
Type:	Compulsory
ECTS Credits:	6
Year and Semester:	1st year, 1st Semester
Teaching Staff:	María Sánchez Munilla Douglas Jonathan Boegaerts
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Languages of Instruction:	Spanish (Lectures) English (Practical and Seminar sessions)

1. INTRODUCTION

This course is part of compulsory training included in the Bachelor's Degree in Psychology. It belongs to the subject area "Methods, Designs and Research Techniques in Psychology". Its content is therefore intricately linked to the content covered in the courses "Data Analysis in Psychology" and "Statistical Models in Psychology", and especially to "Research Designs in Psychology".

Throughout the different topics, students will be provided with an initial introduction to the most widely used research methods and techniques in Psychology. The knowledge and competencies to be developed aim to enable students to understand what it means to define Psychology as a science and to become familiar with the main research methods and techniques used in the discipline. This knowledge should allow students to understand and critically analyze the research studies described in their various courses, to grasp the essential elements of a research project, and to lay the groundwork for courses such as "Research Designs in Psychology".

This course is associated with the programme *Development of Academic Skills in Degree Programmes* Degree of the CUCC, specifically concerning the conduct of bibliographic searches and research assignments, and the application of APA guidelines. As a result, the course includes activities that will be assessed and which are described further on.

For the completion of any academic work, students are reminded of the importance of consulting teaching staff regarding the permitted use of artificial intelligence (AI) tools. Unless explicitly stated in the course guide or in the instructions for a specific activity or assignment, AI tools are not to be used under any circumstances. Students are reminded that the improper use of such technologies, including the generation of work without express authorisation, may constitute academic fraud. It is therefore recommended that students review the university's regulations on the use of AI, act with responsibility and transparency throughout the learning process, and consult teaching staff with any questions in this regard.

Summary

This is a compulsory course worth 6 ECTS credits. It is taught in Spanish in the first semester of the first year of the Bachelor's Degree in Psychology. A C1 level of Spanish is required for adequate progress in the course. Practical and seminar sessions will be developed in English.

Throughout the course, students are expected to understand what it means to define psychology as a science, to identify the stages of a research process, to recognise the ethical standards that must be observed, and to become familiar with the most widely used data collection techniques, as well as gain an initial introduction to the most common quantitative and qualitative research designs.

2. COMPETENCIES

Generic Competencies

CG1. To possess and understand the knowledge that defines and structures Psychology as a scientific discipline, including its theories, methods, and areas of application, at a level supported by advanced academic texts and incorporating insights from the forefront of the field.

CG2. To be able to apply this knowledge in a professional manner through the development and defense of arguments, as well as the identification, articulation, and resolution of problems in the field of Psychology, equipping students for professional practice as psychologists at a general, non-specialised level.

CG3. To be able to gather and interpret relevant data relating to human behaviour, both individual and social, and to the context in which it occurs, in order to make informed judgements on social, scientific, or ethical issues within the field of psychology.

CG4. To be able to convey information, ideas, problems, and solutions on matters relating to human behaviour to both specialist and non-specialist audiences.

CG5. To have developed the learning skills necessary to pursue further training with a high degree of autonomy, particularly in Master's programmes that provide advanced, specialised academic, professional, or research-oriented education in Psychology.

Transversal Competencies

CT1. To be able to express oneself correctly in Spanish within one's disciplinary field.

CT2. To be able to understand and communicate in a foreign language within one's disciplinary field, particularly English.

CT3. To be able to manage information and knowledge within one's disciplinary field, including basic use of information and communication technology tools.

CT6. Ability to work collaboratively in teams.

CT7. To develop introductory research skills.

Specific Competencies

CE6. To know and understand the various research methods and designs, as well as the data analysis techniques characteristic of the field of Psychology.

CE16. To be aware of and to comply with the deontological obligations applicable to Psychology.

3. COURSE CONTENT

Topics	Total Hours
Module 1. Science and Psychology. Definition, objectives, and basic assumptions of science. The scientific method. Introduction to the research process.	6
Module 2. The Research Process. Documentation. Definition of variables. Hypothesis testing. The research report. APA format.	8
Module 3. Research Ethics. Deontology. Principles of psychoethics. The Psychologist's Code of Ethics. The APA Code of Conduct.	4
Module 4. Quantitative Methodologies. Data collection techniques: measurement instruments (apparatus, interviews, tests, scales, questionnaires, observation codes, sociograms, ad hoc records). Properties of quantitative measurement and the research process (reliability and validity).	7
Module 5. Quantitative Designs. Introduction to quantitative designs: experimental, quasi-experimental and ex post facto.	7
Module 6. Qualitative Descriptive Methodologies. Data collection techniques: qualitative observation (participant observation, task	5

analysis, and document analysis), interviews (in-depth interviews, focus groups and the Delphi method) and qualitative data analysis.	
Module 7. Qualitative Designs. Ethnography, case studies, action research, participatory action research.	5
Module 8. Descriptive Methodologies (II): Quantitative Observation. Definition of the object of observation, methods for observing and recording observations, development of observation codes, types of measures, sampling of participants, time and settings, reliability of observation, sources of error.	6

4. TEACHING-LEARNING METHODOLOGIES AND TRAINING ACTIVITIES

4.1. Credit Distribution

Classes, accounting for one-third of the ECTS credits, will be distributed throughout the semester across three organisational formats: lectures, practical classes, and seminars.

- ✓ **Lectures.** A multi-method approach will be employed. Some theoretical content will be provided and/or presented by the professor, while other content may be researched or developed by students themselves. When required by the professor, students must have read the relevant topic prior to class, whose content will then be discussed, debated, or clarified. Self-directed activities of a theoretical nature are also included within this category.
- ✓ **Practical Classes.** Individual and/or group practical activities will be carried out under the guidance of the professor. These activities will include practical problems, analysis and discussion of documentary and/or audiovisual material (articles, videos, scientific documentaries), as well as the presentation of completed work. In addition, practical classes will provide guidance to direct and support students' independent individual and group work.
- ✓ **Seminars.** These sessions will be devoted to exploring various practical aspects of scientific research through an interdisciplinary seminar conducted in conjunction with the course History, Science, and the Profession. They will serve to guide students' independent work, with the aim of fostering a scientific mindset and the capacity for critical thinking.

The **independent study** component accounts for two-thirds of the ECTS credits for the course (100 hours). To succeed in the course, it is essential that students dedicate this time to working on the subject. It includes:

- ✓ Completion of activities or tasks, directed during in-person classes, for submission to the professor or presentation in class.
- ✓ Preparation and completion of assignments.
- ✓ Independent study.
- ✓ Exam preparation.

The professors will hold **office hours** in which they will offer personalized attention to help the students, assist, facilitate and guide them through their learning process.

Total number of hours: 150	
Number of contact hours: 50 h	30 hours of Lectures
	15 hours of Practical Classes
	3 hours of Seminars
	2 hours of Assessment Tasks
Number of independent study hours: 100 h	100 hours of independent study

4.2. Methodological Strategies, Materials and Teaching Resources

Teaching-Learning Methods

An active, participatory methodology will be employed in all classes.

To engage with course content, students will have access to recommended readings (textbooks, articles, and book chapters) and materials prepared by the professors, with corresponding explanations and analyses. A variety of activities will be carried out, including the conduct of small-scale research projects.

Materials and Resources

For the development of the course, a variety of supporting materials and resources will be used to cover the different topics and carry out practical activities: documentation provided by the professor, scientific journal articles, book chapters covering both theoretical and practical content, assessment instruments, and case studies. At the beginning of the academic year, the professor will recommend relevant published textbooks for the course.

The center's virtual learning environment will be used to ensure students have quick and effective access to the materials required for the course. Use will also be made of interactive whiteboards, projectors, the multimedia classroom and, where appropriate, computers and other digital resources.

5. ASSESSMENT: criteria, learning outcomes, grading, and evaluation procedures

To pass the course, students must demonstrate that they have achieved all the competencies set out in this guide through the various assessment instruments established for this purpose. Students are required to complete all assessment tasks included in this guide as a mandatory requirement, both within the continuous assessment process and the final assessment process, whether in the ordinary or the extraordinary examination session.

Assessment Criteria

- To understand what defines Psychology as a science, identifying the characteristics of the scientific method and its application in the study of human behaviour from an ethical perspective.
- To demonstrate the ability to explain the main methods, designs and data collection and analysis techniques used in psychological research, encompassing both quantitative and qualitative approaches.
- To demonstrate, through written assignments, presentations and practical activities, the ability to design small-scale empirical studies, formulating hypotheses, defining variables, and presenting results in a clear and rigorous manner. To search for and select national and international scientific sources in relevant psychology databases, specifying search criteria and correctly applying citation and reference guidelines (APA format).
- To collaborate in group research projects, demonstrating initiative, individual responsibility, and the capacity for autonomous learning in the area of research methods.

Relationship between Competencies and Assessment Criteria

Competencies	Assessment Criteria:
CE6	To demonstrate the ability to explain the main methods, designs and data collection and analysis techniques used in psychological research, encompassing both quantitative and qualitative approaches.
CE16	To understand what defines Psychology as a science, identifying the characteristics of the scientific method and its application in the study of human behaviour from an ethical perspective.
CT2, CT3	To search for and select national and international scientific sources in relevant psychology databases, specifying search criteria and correctly applying citation and reference guidelines (APA format).
CT1, CT6, CT7	To demonstrate, through written assignments, presentations and practical activities, the ability to design small-scale empirical

	studies, formulating hypotheses, defining variables, and presenting results in a clear and rigorous manner. To collaborate in group research projects, demonstrating initiative, individual responsibility, and the capacity for autonomous learning in the area of research methods.
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Learning outcomes:

The following section presents the learning outcomes associated with each of the competencies corresponding to this course:

Competency	LEARNING OUTCOMES
CG1	Understands what it means to define Psychology as a science and what the scientific method entails.
CG2	Is able to design a psychological research study. Is able to apply acquired knowledge to the appropriate interpretation of research findings.
CG3	Possesses the methodological and statistical knowledge required to interpret research studies and publications in Psychology. Searches for and uses documentary sources relevant to the discipline.
CG4	Is able to use appropriate technical language and knows which data to communicate based on the statistical analyses performed. Knows how to represent research results graphically.
CG5	Is able to conduct small-scale empirical studies and carry out research activities.
CT1	Is able to use appropriate technical language and knows which data to communicate based on the statistical analyses performed.
CT2	Is able to comprehend and analyse subject-related texts in English and incorporate them into their own work.
CT3	Knows how to represent research results graphically.
CT6	Collaborates with others and contributes to shared projects. Takes individual responsibility within collective work.
CT7	Is able to conduct small-scale empirical studies and carry out research activities.
CE6	Is familiar with the main research methods and techniques used in Psychology.
CE16	Adheres to deontological standards when designing research studies and communicating their findings.

Grading Criteria:

Assessment Criteria	Percentage
Understands what defines Psychology as a science, identifying the characteristics of the scientific method and its application in the study of human behaviour from an ethical perspective.	20%
Demonstrates the ability to explain the main methods, designs and data collection and analysis techniques used in psychological research, encompassing both quantitative and qualitative approaches.	20%
Demonstrates, through written assignments, presentations and practical activities, the ability to design small-scale empirical studies, formulating hypotheses, defining variables, and presenting results clearly and rigorously.	20%
Searches for and selects national and international scientific sources in relevant psychology databases, specifying search criteria and correctly applying citation and reference guidelines (APA format).	20%
Collaborates in group research projects, demonstrating initiative, individual responsibility, and the capacity for autonomous learning in the area of research methods.	20%

Assessment Procedure

The assessment system is based on the **Regulations Governing Learning Assessment Processes at the University of Alcalá**. This regulation establishes, among other things, the following guidelines:

1. This course has **two examination sessions**: one **ordinary session**, held in January, and one **extraordinary session**, held in June.
2. The **ordinary examination session** will be conducted under continuous **assessment modality**.
3. If any student is unable to follow the continuous assessment modality during the ordinary session, they must **apply for the final assessment modality** by writing to the course professor. This request must be submitted during the first two weeks of classes, will be resolved by the Centre's management, and may or may not be granted.
4. The **extraordinary examination session** It is intended for students who did not pass or did not attend the ordinary examination session.
5. The characteristics of the continuous and final assessment modalities for this subject are in this guide.
6. For further clarification regarding assessment regulations, the following document may be consulted: <https://www.uah.es/export/sites/uah/es/conoce-la-uah/organizacion-y-gobierno/galleries/Galeria-Secretaria-General/Normativa-Evaluacion-Aprendizajes.pdf>

Requirements for **continuous assessment** during the ordinary examination session:

- Attendance at lectures, practical classes, and seminars.
- Completion and timely submission of assigned activities and coursework.
- Active participation in the teaching-learning process.

If a continuous student does not meet these requirements, **they will not be permitted to attend the ordinary examination session**. The official record will reflect a grade of Not Presented, and the student will be eligible to attend the extraordinary session, for which they must contact the course professor.

To pass the course, students must demonstrate that they have achieved all the competencies set out in this guide through the various assessment instruments established for this purpose, attaining a minimum grade of 5 in each assessment block (practical activities, seminar, final examination). Students are required to complete all assessment tasks included in this guide as a mandatory requirement, both within the continuous assessment process and the final assessment process, whether in the ordinary or the extraordinary examination session.

Continuous Assessment Table (Ordinary and Extraordinary Sessions):

Tools Assessment Criteria	Practical Activities	Seminar	Final Examination	%
Understands what defines Psychology as a science, identifying the characteristics of the scientific method and its application in the study of human behaviour from an ethical perspective.	X	X	X	20
Demonstrates the ability to explain the main methods, designs and data collection and analysis techniques used in psychological research, encompassing both quantitative and qualitative approaches.	X		X	20
Demonstrates, through written assignments, presentations and practical activities, the ability to design small-scale empirical studies, formulating hypotheses, defining variables, and presenting results clearly and rigorously.	X			20
Searches for and selects national and international scientific sources in relevant psychology databases, specifying search criteria and correctly applying citation and reference guidelines (APA format).	X	X		20
Collaborates in group research projects, demonstrating initiative, individual responsibility, and the capacity for autonomous learning in the area of research methods.	X			20
Total	40%	20%	40%	100%

Final Assessment Table (Ordinary and Extraordinary Sessions)

Assessment Criteria	Tools	
	Final Examination	%
Understands what defines Psychology as a science, identifying the characteristics of the scientific method and its application in the study of human behaviour from an ethical perspective.	X	20
Demonstrates the ability to explain the main methods, designs and data collection and analysis techniques used in psychological research, encompassing both quantitative and qualitative approaches.	X	20
Demonstrates, through written assignments, presentations and practical activities, the ability to design small-scale empirical studies, formulating hypotheses, defining variables, and presenting results clearly and rigorously.	X	20
Searches for and selects national and international scientific sources in relevant psychology databases, specifying search criteria and correctly applying citation and reference guidelines (APA format).	X	20
Collaborates in group research projects, demonstrating initiative, individual responsibility, and the capacity for autonomous learning in the area of research methods.	X	20
Total	100%	100%

During the conduct of assessment tasks, students must adhere to the guidelines set out in the Regulations Establishing the Code of Conduct of the University of Alcalá, as well as the possible implications of any irregularities committed during such tasks, including the consequences of academic fraud as stipulated in the Disciplinary Regulations for Students of the University of Alcalá.

The teaching-learning methodology and assessment process will be adapted as necessary, in accordance with the guidance of the CUCC Counselling Service and/or the UAH Diversity Support Unit, in order to implement curricular adaptations for students with specific needs, upon submission of documentation certifying such needs.

6. BIBLIOGRAPHY

Recommended Bibliography

The two textbooks listed below will serve as primary reference materials throughout the course:

León, O. G., y Montero, I. (2020). *Research methods in psychology and education. Quantitative and qualitative traditions* (4th revised edition). McGraw-Hill.

Fontes de Gracia, S., García Gallego, C., Quintanilla Cobián, L., Rodríguez Fernández, R., Rubio de Lemus, P., y Sarriá Sánchez, E. (2019). *Foundations of research in psychology*. UNED.

Core Bibliography

The following textbooks will also prove useful:

Martínez Arias, R., Castellanos, M. A., y Chacón, J. C. (2014). *Research methods in Psychology*. Eos.

This is a pedagogically oriented text, precise in its approach and rich in references and bibliographic resources available at the end of each chapter. It covers the syllabus of a standard Methodology course and includes additional chapters that the authors consider essential for understanding current research practices, such as meta-analysis and mixed-method designs.

Moreno, R., y Martínez, R.J. (2000) *Methodological foundations in psychology and related sciences*. Pirámide.

This book focuses on the most relevant conceptual and theoretical aspects involved in designing and conducting research across different areas of psychology. The volume includes a multilingual glossary at the end, which may prove useful for facilitating information searches in international databases.

Shaughnessy, J., Zechmeister, E., y Zechmeister, J. (2007). *Research methods in psychology*. McGraw-Hill.

This textbook is designed to help readers understand the methodology used in psychological research. It includes examples drawn from various research areas and covers all stages of the research process, from design and implementation to data analysis, and the presentation and review of research reports.

Electronic Resources

- <http://www.apastyle.org/learn/index.aspx>

Website of the American Psychological Association, where the style guidelines developed by this association can be consulted. These guidelines are followed by the majority of scientific publications.

- <http://www.copmadrid.org/web/>
Website of the Official College of Psychologists of Madrid, where links can be found to the code of ethics, the use of tests and assessment instruments in research, and scientific-professional journals. A variety of courses of interest are also offered, both in-person and online.
- <http://journals.cambridge.org/action/displayJournal?jid=SJP>
A journal whose aim is the international dissemination of empirical research and methodological proposals relevant to different areas of Psychology.