

31204 - Research Methods

Syllabus Information

Academic Year: 2022/23

Subject: 31204 - Research Methods

Faculty / School: 301 - Facultad de Ciencias Sociales y Humanas

Degree: 613 - Degree in Psychology

ECTS: 6.0

Year: 1

Semester: First semester

Subject Type: Compulsory

Module:

1. General information

1.1. Aims of the course

The aim of this subject is to introduce the student to the scientific research process. The following will be addressed:

- The scientific method
- The different designs
- The scientific report (APA format)

These approaches and objectives are aligned with some of the Sustainable Development Goals, SDG, of the 2030 Agenda (<https://www.un.org/sustainabledevelopment/es/>) and certain specific goals, in such a way that the acquisition of the Learning outcomes of the subject provides training and competence to the student to contribute to a certain extent to their achievement:

Goal 4: Ensure inclusive, equitable and quality education and promote lifelong learning opportunities for all

4.4 By 2030, significantly increase the number of young people and adults who have the necessary skills, including technical and professional skills, to access employment, decent work and entrepreneurship

Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

8.6 By 2030, significantly reduce the proportion of young people who are not employed and not in education or training

Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

9.5 Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending

1.2. Context and importance of this course in the degree

Research Methods is the first of four subjects in the Methodology of the Behavioral Research area of the Psychology degree at the University of Zaragoza. It is an important subject for:

- Correctly acquire scientific knowledge in other subjects of the degree
- Learn to be autonomous in the search for scientific information
- Communicate with other professionals through scientific reports

1.3. Recommendations to take this course

No prior knowledge is required.

2. Learning goals

2.1. Competences

- To know different research designs in Psychology
- To know procedures for formulating and testing hypotheses
- To understand and prepare scientific reports
- To search for and value the contributions that scientific research provides to professional knowledge and practice
- To collect and interpret relevant data to make judgments that include reflection on relevant issues of a social, scientific or ethical nature
- To know how to use relevant scientific documentary sources with the capacity for critical analysis and synthesis
- To acquire the necessary skills to define problems, design, and execute elementary investigations

2.2. Learning goals

- To know the characteristics of science and the scientific method
- To formulate research questions
- To discriminate between different types of variables
- To identify the characteristics of different research methods and designs
- To assess the quality of methods used in research
- To search and select specialized information from different documentary sources
- To properly interpret and prepare a scientific reports

2.3. Importance of learning goals

Good training in research methods makes it possible to understand a scientific publication and to determine its degree of validity to decide whether to apply it in professional practice. The professional work of psychologists requires knowledge of scientific publications in the specialty in which they work, even if they do not intend to dedicate themselves to research. This allows psychologists to apply the best possible interventions.

3. Assessment (1st and 2nd call)

3.1. Assessment tasks (description of tasks, marking system and assessment criteria)

The evaluation of the course will consist of two parts:

Evaluation of the theoretical part (60% of the final grade)

This evaluation will be focused on evaluating the theoretical knowledge of the subject. It will represent 60% of the final grade.

Evaluation of the practical part (40% of the final grade)

This evaluation will be aimed at evaluating the practical aspects of the subject. It will represent 40% of the final grade. This evaluation will be obtained based on the evaluation of different activities (e.g., assignments, exercises, exams, etc.) carried out throughout the course. Those students who cannot, or do not want to, take this continuous evaluation, will have to take the evaluation of the practical part on the day of the final exam. Similarly, those who have taken the continuous evaluation and obtained a score of less than 5 out of 10 will also have to take the evaluation of the practical part on the day of the final exam.

Final grade

The final grade will be obtained by the weighted average of the different parts of the evaluation, as long as the score of both parts is equal or higher than 5 out of 10. Otherwise, the final grade will be the score of the part with the lower score. Consequently, it will only be possible to pass this subject if both parts have been passed.

4. Methodology, learning tasks, syllabus and resources

4.1. Methodological overview

The course consists of theoretical and practical classes. The theoretical classes are aimed at explaining the theoretical foundation of the subject. While the practical classes have the objective of working on the theoretical contents learned through various activities in order to reinforce them.

4.2. Learning tasks

The activities will be varied, and will include both exercises that will be carried out individually to strengthen the most relevant theoretical concepts of the subject, as well as another set of practices that, from teamwork, will give the opportunity to participate in the different phases of the research process and preparation and interpretation of scientific reports.

4.3. Syllabus

TOPIC 1. SCIENCE AND KNOWLEDGE. PSYCHOLOGY AS A SCIENCE. REPLICABILITY

TOPIC 2. THE RESEARCH PROCESS I. DOCUMENTATION. DATABASES

TOPIC 3. THE RESEARCH PROCESS II. PROPERTIES OF THE RESEARCH PROCESS

TOPIC 4. THE SCIENTIFIC REPORT

TOPIC 5. DESCRIPTIVE METHODOLOGIES I. OBSERVATION

TOPIC 6. DESCRIPTIVE METHODOLOGIES II. QUALITATIVE METHODOLOGIES

TOPIC 7. EXPERIMENTAL METHODOLOGIES I. THE LOGIC OF EXPERIMENTATION. DESIGNS WITH DIFFERENT SUBJECTS

TOPIC 8. EXPERIMENTAL METHODOLOGIES II. DESIGNS WITH THE SAME SUBJECTS AND FACTORIAL DESIGNS

TOPIC 9. APPLIED RESEARCH. QUASI-EXPERIMENTAL METHODOLOGIES AND EX POST FACTO METHODOLOGIES

4.4. Course planning and calendar

At the beginning of the course, the students will be provided with a calendar with all the activities.

Exam times and dates can be found on the faculty website: <http://fcsch.unizar.es/>.

Moodle will be used to communicate other relevant dates.

4.5. Bibliography and recommended resources

To consult the bibliography of the subject, click on the following link:

<http://psfunizar10.unizar.es/br13/egAsignaturas.php?codigo=31204>