

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

<b>Code</b>	35281
<b>Name</b>	Methodology Fundamentals in Speech Therapy
<b>Cycle</b>	Grade
<b>ECTS Credits</b>	6.0
<b>Academic year</b>	2021 - 2022

**Study (s)**

<b>Degree</b>	<b>Center</b>	<b>Acad. year</b>	<b>Period</b>
1203 - Degree in Speech Therapy	Faculty of Psychology and Speech Therapy	1	First term

**Subject-matter**

<b>Degree</b>	<b>Subject-matter</b>	<b>Character</b>
1203 - Degree in Speech Therapy	8 - Methodological foundations of speech therapy	Basic Training

**Coordination**

<b>Name</b>	<b>Department</b>
RUIZ RUIZ, JUAN C.	267 - Behavioral Sciences Methodology

**SUMMARY**

The subject of Methodological Foundations of Speech Therapy is a mandatory theoretical-practical four-month subject that is taught in the first semester of the first year of the degree of Speech Therapy.

The objective of the course is for the student to master the basic aspects related to the principles of scientific research and the main research methods and designs used in Speech Therapy. As well as the fundamentals of statistical data analysis and its interpretation in the field of research in Speech Therapy and, in general, in health sciences.

In addition, the subject aims to show the appropriate strategies to access scientific information and to show what is the structure of a scientific article, along with the guidelines for its critical reading.



## PREVIOUS KNOWLEDGE

### Relationship to other subjects of the same degree

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

### Other requirements

It is recommended that students have basic knowledge of Statistics (basic knowledge of descriptive and inferential statistics) and Information (knowledge of basic computer use, web browsing and office-word, excel, power point,).

## OUTCOMES

### 1203 - Degree in Speech Therapy

- Students must have acquired knowledge and understanding in a specific field of study, on the basis of general secondary education and at a level that includes mainly knowledge drawn from advanced textbooks, but also some cutting-edge knowledge in their field of study.
- Students must be able to apply their knowledge to their work or vocation in a professional manner and have acquired the competences required for the preparation and defence of arguments and for problem solving in their field of study.
- Students must have the ability to gather and interpret relevant data (usually in their field of study) to make judgements that take relevant social, scientific or ethical issues into consideration.
- Students must be able to communicate information, ideas, problems and solutions to both expert and lay audiences.
- Students must have developed the learning skills needed to undertake further study with a high degree of autonomy.
- Use the exploration techniques and instruments typical of the profession and record, synthesize and interpret the data provided by integrating them into the information set.
- Understand and evaluate the scientific production underpinning the professional development of the speech therapist.
- Be able to develop skills such as regulating their own learning, solving problems, reasoning critically and adapting to new situations.
- Communicate findings and conclusions to patients, their families and other professionals involved in their care, both orally and in writing, considering the sociolinguistic characteristics of the environment.
- Manage the technologies of communication and information.
- Know the principles of the scientific method and the characteristics of the different methods used in speech therapy and their analysis techniques.



- Know the different research designs, the methods of formulation and testing of hypothesis and the interpretation of results.
- Be able to apply methodological knowledge to solve the problems usually encountered in professional practice.
- Be able to collect, analyse and interpret data using statistical software and other information technologies.

## LEARNING OUTCOMES

Understand and apply the fundamentals of scientific methodology applied to the speech able to identify and measure specific to the field of Speech variables. To design an experiment or test the effectiveness of a speech therapy with a scientific approach. Pider process and analyze the data collected Power synthesize and communicate the main results by reporting.

## DESCRIPTION OF CONTENTS

### 1. SCIENCE AND SCIENTIFIC METHOD.

Research and knowledge generation:

- Scientific Approach.
- Objectives of the scientific method.
- Build and test theories.
- Classification of research methods in speech therapy.

### 2. RESEARCH DESIGN.

The process of research.

- Questions, problems, hypotheses.
- Variables and validity.
- Implementation of research.
- Statistical analysis and interpretation of results.
- The report of the investigation.

### 3. WRITING AND READING A RESEARCH REPORT.

- Structure of a scientific report.
- Standards for critical reading of a scientific report.
- Process publication of a scientific report.



#### **4. EXPERIMENTAL METHOD.**

- Experiment.
- Designs by independent groups.
- Repeated measures designs.
- Mixed designs.
- Data analysis and interpretation.

#### **5. APPLIED RESEARCH: DESIGNS "N" SMALL.**

- Introduction.
- General procedures.
- Main types of small n designs.
  - \* Basic designs withdrawal.
  - \* Multiple baseline designs.
  - \* Designs alternative treatments.
- Data analysis and interpretation.

#### **6. APPLIED RESEARCH: DESIGNS QUASI EXPERIMENTAL AND EX POST FACTO.**

- Introduction.
- Characteristics, problems of validity and applications.
- Top quasi-experimental research designs.
- Research designs ex post facto: retrospective and prospective.
- Data analysis and interpretation.

#### **7. DESCRIPTIVE METHODS SURVEYS.**

- Uses and characteristics of surveys.
- Survey Methods: Questionnaires and Interviews.
- Sampling: Sample selection.
- Designs.
  - \* Transverse.
  - \* Longitudinal: De panel. Trend. Cohort.
- Data: Coding, statistical analysis and interpretation.

#### **8. DESCRIPTIVE METHODS: OBSERVATION.**

- Observing behavior.
- Observational Methods
- Design of an observational research.
- Categorization: descriptive levels, system categories and levels of response.
- Registration: Rules, registration rules. Sampling: sampling rules. Types of measures.
- Designer: taxonomic criteria and types.



- Analysis of observational data.

## WORKLOAD

ACTIVITY	Hours	% To be attended
Theory classes	45,00	100
Classroom practices	15,00	100
Study and independent work	90,00	0
<b>TOTAL</b>	<b>150,00</b>	

## TEACHING METHODOLOGY

1. Lectures with audiovisual support, with links to various websites related to the subject taught, textbooks and scientific articles and other reading materials and content. These activities are aimed at teaching the theoretical part of the subject.

February. Practices in networked classroom sessions, seminars and workshops for applied aspects in which students individually or in a group working with the material that is provided (tests, articles, computers, software and databases) to reach a target. An important feature is that pooling followed by a debate on the learning objective in question is made. Here the student takes an active part in the learning process. The contents of these activities are intended to train students to be able to acquire different skills. Three. Performing exercises on theoretical and applied aspects of self-contained materials.

## EVALUATION

The result of the student evaluation is a qualification that will oscillate between 0 and 10 points. This qualification depends of the following parts:

**Section 1: ASSESSMENT OF THEORETICAL AND PRACTICAL CONTENT THROUGH ORAL, WRITTEN OR SKILL PERFORMANCE TASKS.**

It will represent the 85% of the final grade.

It will consist of two parts:

A) Final evaluation (final exam), it will represent the 70% of the final grade. It is necessary to get a minimum of 5 points out of 10 to pass this part. This part A is recoverable in second final exam opportunity.

B) Continuous evaluation (oral, written or skills performance tasks) during the teaching period of the course, it will represent the 15% of the final grade. This part B is not recoverable in the second final exam opportunity.

**Section 2: PRESENTATION OF ORAL OR WRITTEN REPORTS, INDIVIDUAL OR GROUP WORK, CLINICAL CASES, USE OF DIAGNOSTIC TESTS AND PROTOCOLS.**





It will represent the 15% of the final grade. It is necessary to achieve a minimum of 50% points in this section to overcome the course.

This section is also recoverable in the second final exam opportunity.

Additional considerations:

1. The described sections will be summed only when a student reach the minimum required conditions.
2. If a student do not pass some of the compulsory sections in the final exam opportunity, the points of the other sections will be keep for the second final exam opportunity.
3. Dates of the ORAL OR WRITTEN TESTS, AND SKILL PERFORMANCE of the Section 1.B will be established by the teacher along the course. They can be individual or groupal evaluations about the topics listed in the Course Guide.
4. The qualification of the course follow the Normative of Qualifications of the University of Valencia (ACGUV 108/2017). In accordance with it, the following scale of qualification will be used:
5. As stated in the normative about the assignement of "Excellent with honors" qualification, it will be for strict order of numerical mark. In case of tie, the qualification will be assigned to the student with higher numerical mark in the Section 1.B. If it follows the tie, the higher of the section 2 and, finally the higher of the Section 1.B. If all of them are equal, teacher can add an additional exam.
6. The copy or plagiarism of any task of the evaluation will suppose the impossibility to pass the course. The relevant disciplinary measures may be applied.
7. Take into account that, in accordance with the article 13.d) of the Statute of the University Student (RD 1791/2010, of 30 of December), a student is to owe abstain in the utilisation or cooperation in fraudulent procedures in the tests of evaluation and works that he realise, or in official documents of the university.
8. In the individual or colective tutorials, the professor can to ask a student for questions in order to verify the degree of participation and acompliance of the objectives of a task of the course. If not accepting this verification, the student will not pass the task or activity in question .
9. The marks obtained in the first call will be incorporated in the minutes of the subject according to the following rules:
  - If there is no qualification evaluation section with greater weight, the rating will not be presented, regardless of the rest.
  - If there's rating in the evaluation section with greater weight and does not reach the minimum requirements shall be entered SUSPENSE and base 10 numerical grade qualification of this section.
  - If there's rating in the evaluation section with greater weight, and this exceeds the minimum requirements, but those requirements are met in any of the remaining sections consist SUSPENSE and numerical note will be based 10 qualifying paragraph by which does not exceed the subject.
10. SECOND CALL, proceed according to the following rules:
  - Only fit the PRESENTED NO option when has not been presented to more than one of the sections of assessment, including among these the highest weighting.
  - If scores in all sections of assessment and no minimum requirements are met in any of them, and the note will consist SUSPENSE base 10 corresponding to the section that has not been surpassed. If more than one section, the unsurpassed, consist the maximum score within the suspense in base 10.



- If you do not exceed one or more of the minimum requirements and lack a section evaluation shall be recorded and numerical note SUSPENSE base 10 of qualification paragraph not exceeded.
- If two evaluation points are exceeded and there is a third party that has not presented evidence evaluation shall be recorded SUSPENSE and as rating, the average score being 0.0 part not presented (maximum possible 4.9).
- If the test higher weight is exceeded, but evidence is lacking in one or more of the other sections, consist SUSPENSE. Parts are added together and: a) if the sum is less than 5, it will be recorded as a result; b) if the sum is greater than 5, shall be recorded 4.9.

11. If the subject is passed in first call, the student will not be able to examine in second call with the purpose to improve his mark.

12. If the student wants to review his mark he must follow the "Reglament d'avaluació i qualificació de la Universitat de València per a títols de grau i màster (ACGUV de 30 de maig de 2017)".

13. Attendance to the practice classes is a course request and at least 80% of the classes will be required to pass the course. Non-attendance should be due to justified reasons.

## REFERENCES

### Basic

- León, O.G. y Montero, I. (2015). Métodos de investigación en psicología y educación. McGraw Hill/Interamericana de España, S.L. Madrid.
- Botella, J., Suero, M., Ximénez, C. (2012). Análisis de datos en psicología I. Pirámide: Madrid.

### Additional

- Barlow, D.H. y Hersen, M. (1988). Diseños experimentales de caso único: Estrategias para el estudio del cambio conductual. Martínez Roca: Barcelona.
- Meltzoff, J. (2000). Crítica a la investigación. Psicología y campos afines. Alianza Editorial: Madrid.
- Navas, M.J. (coordinadora) (2001). Métodos, diseños y técnicas de investigación en psicología. U.N.E.D: Madrid.
- Shaughnessy, J.J., Zechmeister, E.B. y Zechmeister, J.S. (2007). Métodos de investigación en Psicología (7ª edición). McGraw Hill. Méjico.
- Hernández, R., Fernández-Collado, C. y Baptista, P. (2010). Fundamentos de metodología de la investigación. McGraw Hill. Méjico.
- Ritchey, F.J. (2008). Estadística para las ciencias sociales. (2ª ed.) McGrawHill. Méjico.



## **ADDENDUM COVID-19**

**This addendum will only be activated if the health situation requires so and with the prior agreement of the Governing Council**

### **1. CONTENTS**

There are no modifications in the contents that appear in the teaching guide of the subject.

### **2. VOLUME OF WORK AND TEMPORARY PLANNING OF TEACHING**

The volume of work that appears in the teaching guide of the subject is maintained. 100% of the theoretical classes (45 hours) will take place virtually. 100% of the practical classes (15 hours) will be classroom classes (if the health situation allows it).

### **3. TEACHING METHODOLOGY**

The course will follow a hybrid model of mixed teaching.

The theoretical classes, in accordance with the provisions for the entire degree, will be taught on-line. The materials will be made available to students through the Virtual Classroom and classes will be taught synchronously according to the class schedule established by the faculty.

The practical classes will be classroom classes. In case that sanitary conditions so require, practical classes will become on-line, teaching will take place using materials designed for on-line learning and using virtual classroom resources.

Student tutoring will be carried out through the official Valencia University email. If deemed convenient, student tutoring may be held by videoconference in the Virtual Classroom environment.

### **4. ASSESSMENT**

The structure of the assessment system that appears in the teaching guide of the subject is maintained. However, if throughout the semester teaching becomes totally on-line and the final exam could not be carried out in person, the weights of the different sections of the assessment system would be as follows:

Section 1: Assessment of theoretical and practical content through oral, written or skill performance tests. It will represent 70% of the final mark. It will have two parts:

- A) Final assessment (final exam official call), 50% of the final mark. It is necessary to achieve a minimum of 50% to pass the course. This section A is recoverable on second call.

- B) Continuous evaluation (oral, written or skills performance tests) during the teaching period of the subject, 20% of the final mark. This section B is not recoverable on second call.

Section 2: Oral or written presentation of reports, individual or group work, clinical cases, problem solving or management of diagnostic tests. The weight of this section is 30% of the final mark. It is necessary to achieve a minimum of 50% in this section to pass the subject. This section is recoverable on second call.





Any other aspect not included in this assessment section, but that appears in the assessment section of the subject's teaching guide, is maintained.

In case that the health circumstances prevent the realization of in person exams, these will be organized through the virtual classroom.

## **5. BIBLIOGRAPHY**

To what is already indicated in the Teaching Guide, the following is added:

The Library Service of the UV offers students access to online manuals. In addition, the Virtual Classroom of the course will include a compilation of materials available online.