

**COURSE DATA****DATA SUBJECT**

Code: 43472
Name: Scientific principles
Cycle: Master's Degree
ECTS Credits: 6
Academic year: 2025-26

STUDY (S)

Degree	Center	Acad. year	Period
2157 - Master's degree in Research in Subject Didactics	Facultat de Formació del Professorat	1	First quarter

SUBJECT-MATTER

Degree	Subject-matter	Character
2157 - Master's degree in Research in Subject Didactics	Fundamentals for research	COMPULSORY

COORDINATION

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SUMMARY

The subject of Scientific Bases has to provide students with the core knowledge necessary to be able to tackle the comprehensive reading of research publications in their field. It is designed to form a whole with the other subjects of the subject Bases for Research, so that each of them will affect one of the three main axes of the research in the specific didactics, the scientific - disciplinary, the didactic and the teacher.

This subject deals with the study of certain disciplinary elements necessary to acquire an adequate knowledge of the problems of teaching and learning at the different educational levels and to develop effective and innovative proposals for didactic research.

PREVIOUS KNOWLEDGE**RELATIONSHIP TO OTHER SUBJECTS OF THE SAME DEGREE**

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



OTHER REQUIREMENTS

This subject does not require specific prior knowledge beyond that which any graduate who has been admitted to the master's degree must possess.

COMPETENCES / LEARNING OUTCOMES

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Conocer y utilizar procedimientos básicos de investigación didáctica.

Create spaces for research and learning with special attention to equity, emotional and values education, equal rights and opportunities between men and women, citizenship training and respect for human rights that facilitate life in society, decision-making and the construction of a sustainable future.

Integrate ethical values and responsibility associated with research tasks into one's own research.

Students should apply acquired knowledge to solve problems in unfamiliar contexts within their field of study, including multidisciplinary scenarios.

Students should demonstrate self-directed learning skills for continued academic growth.

Students should possess and understand foundational knowledge that enables original thinking and research in the field.

Value the social importance of research in Specific Didactics and the need to apply the results of research to improve the quality of education and make it available to all citizens.

DESCRIPTION OF CONTENTS

1. Theoretical didactic frameworks of contemporary research on teaching and learning processes. Research paradigms.

2. Research problems in education

3. Epistemological and methodological elements of research. Research designs

4. Introduction and analysis of the main lines of research in Specific Didactics



6. Specialised bibliography of research in Specific Didactics: strategies and tools for searching information.

WORKLOAD

PRESENCIAL ACTIVITIES

Activity	Hours
Theory	48,00
Total hours	48,00

NON PRESENCIAL ACTIVITIES

Activity	Hours
Attendance at other activities	0,00
Individual or group project	40,00
Independent study and work	62,00
Preparation of lessons	0,00
Preparation for assessment activities	0,00
Resolution of case studies	0,00
Total hours	102,00

TEACHING METHODOLOGY

Depending on the type of activity to be carried out, the following may be used:

- lectures on the content given by teaching staff (usually in theory classes);
- discussions between students under the observation of teaching staff, with or without their intervention (usually in seminars);
- supervised or independent work, either individually or in small groups, to carry out projects, prepare materials, search for information, etc. (usually in the laboratory or as out-of-class activities);
- individual independent or supervised study time (usually to prepare work or to prepare assessment tests);
- presentation of the work carried out to teaching staff and/or other students (usually in seminars),- one-to-one meetings with the tutor to track the student's progress.

EVALUATION

Assessment will be continuous. Students who follow the daily classroom activities will be eligible for continuous assessment as long as their attendance exceeds 80% of the sessions.



In the case of not following the daily activities, students will pass to a final assessment modality that will involve the delivery of an individual work and/or a written test on the totality of the contents taught.

In the continuous assessment modality, the assessment will consist of:

- Participation in class and other activities (lectures, seminars, etc.): up to 30% of the final mark.
- Presentation of individual or small group work: up to 70% of the final mark.
- Final individual oral or written test: up to 70%.

The total of the 3 forms of assessment must add up to exactly 100%.

Plagiarism or the improper use of artificial intelligence tools may be sanctioned in accordance with article 15 of the University of Valencia's assessment and qualification regulations.

REFERENCES

- - Denzin, N. y Lincoln, Y.S. (eds) (1994). Handbook of Qualitative Research. Sage - Guba, E.C. y Lincoln, Y.S. (2002). Paradigmas en competencia en investigación cualitativa. En C. Denman y J. A. Haro (comps.) Por los rincones. Antología de métodos cualitativos en investigación social (pp. 113-145). El Colegio de Sonora. - Kirk, D., Macdonald, D. y O'Sullivan, M. (2006). (eds.). The Handbook of Physical Education. Sage. (1ª parte: Theoretical perspectives in Physical Education research) - Marxen, E. (2009). La etnografía desde el arte. Definiciones, bases teóricas y nuevos escenarios. *Alteridades*, 19 (37), 7-22 - Oregui, E., Aierbe, A. y Bermejo, J. (2019). Habilidad narrativa e identificación de valores y contravalores en dibujos animados por alumnado de Educación Primaria. *Anales de psicología/ Annals of psychology*, 35(2), 269-279. <http://dx.doi.org/10.6018/analesps.35.2.331441> - Sparkes, A.C. (1992). Breve introducción a los paradigmas de investigación alternativos en educación física. *Perspectivas de la Actividad Física y el Deporte*, 11, 29-33. - Schuster, A., Puente, M., Andrada, O., y Maiza, M. (2013). La metodología cualitativa, herramienta para investigar los fenómenos que ocurren en el aula. *La investigación educativa. Revista Electrónica Iberoamericana de Educación en Ciencias y Tecnología*, 4 (2), 109-138.
- - Cohen, L., Manion, L. & Morrison, K. (2011). *Research Methods in Education* (7th edition). Routledge. - García-Monteagudo, D., Morote, A. y Souto, X.M. (2019). Las representaciones del saber académico: Aportaciones desde la Geografía Escolar. *Arxius*, 41, 11-28 - Lizandra, J. y Peiró-Velert, C. (2020). Las relaciones sociales y su papel en la motivación hacia la práctica de actividad física en adolescentes: Un enfoque cualitativo. *Retos*, 37, 41-47. - Martos, D., et al. (2016). Huesos de cristal y Educación Física. Una experiencia de simulación e imaginación hacia la inclusión. *CCD*. 225-234 - Som, A., Delgado, M. y Medina, J. (2007). Efectos de un programa de intervención basado en la expresión corporal sobre la mejora conceptual de hábitos saludables en niños de sexto curso. *Apunts. Educación Física y Deporte*, 90, 12-19. - Verdugo-Perona, J., Olmos, R., Solaz-Portolés, J.J. y Sanjosé, V. (2017). Análisis estructural del conocimiento didáctico del contenido científico escolar en futuros maestros de primaria. *Interciencia*, 42(7), 446-450. - Xu, Y. (2014). Becoming researchers: A narrative study of Chinese university EFL teachers research practice and their professional identity construction. *Language*



Teaching Research, 18(2), 242-259.