

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

Code	33486
Name	Data analysis in education
Cycle	Grade
ECTS Credits	6.0
Academic year	2021 - 2022

Study (s)

Degree	Center	Acad. year	Period
1306 - Degree in Social Education	Faculty of Philosophy and Educational Sciences	2	First term

Subject-matter

Degree	Subject-matter	Character
1306 - Degree in Social Education	326 - Methods and techniques for educational research	Obligatory

Coordination

Name	Department
BO BONET, ROSA MARIA	270 - Research Methodology, Educational Diagnosis and Assessment
LOPEZ GONZALEZ, MARIA EMELINA	270 - Research Methodology, Educational Diagnosis and Assessment
SAEZ GARCIA, ABELARDO	270 - Research Methodology, Educational Diagnosis and Assessment

SUMMARY

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A través de esta asignatura se pretende dotar al estudiante de la información básica para que llegue a comprender los fundamentos de los métodos y técnicas para el Análisis de Datos, que le permitirán ejercer la actividad del/de la educador/educadora social.

El acercamiento al Análisis de Datos se producirá en cuanto a un componente más de cualquier actuación



profesional del/de la educador/educadora social, en el proceso general orientado a responder las cuestiones que le ocupan. De esta forma, se revisarán las principales técnicas descriptivas y explicativas acordes con las estrategias de investigación predominantes en el ámbito educativo.

El enfoque de la asignatura se basará esencialmente sobre la comprensión, el ajuste a la cuestión que se debe responder -toma de decisiones- e interpretación. Por ello, se considera fundamental el aprendizaje dentro de la práctica para conectar los diferentes aspectos teóricos metodológicos con la realidad que interesa abordar.

PREVIOUS KNOWLEDGE

Relationship to other subjects of the same degree

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

Other requirements

OUTCOMES

1306 - Degree in Social Education

- 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.
- Have capacity for analysis and synthesis.
- Demonstrate organisational and planning skills.
- Be able to communicate professionally, both orally and in writing, in the Universitat de València's native languages.



- Be able to use ICT in the field of study and in the professional context.
- Have skills for information management.
- Have problem-solving skills and decision-making capacity.
- Have critical and self-critical capacity.
- Be able to integrate and communicate with experts in other areas and in different contexts.
- Be able to develop, promote and revitalise interpersonal communication skills.
- Show active ethical commitment to human rights, gender equality and sustainability.
- Be prepared for independent lifelong learning.
- Be able to adapt to new situations.
- Develop innovation and creativity in professional practice.
- Show commitment to professional identity, development and ethics.
- Be able to conduct educational research in different contexts.
- Have abilities for quality management.
- Diagnose needs, complex situations and possibilities of people as a basis for educational actions.
- Conduct prospective and evaluative studies on educational characteristics, needs and demands.
- Develop tools for gathering and analysing educational information.
- Design educational plans, programmes, projects, actions and resources in different contexts.
- Advise on the design and implementation of socio-educational plans, programmes, teaching projects, media and activities.
- Identify and make reasoned judgments about socio-educational problems in order to improve professional practice in non-formal contexts.
- Design and implement processes for the evaluation of socio-educational intervention programmes and strategies in various contexts.
- Supervise and evaluate plans, programmes, projects and schools.
- Prepare and interpret technical, research and evaluation reports on educational actions, processes and results.

LEARNING OUTCOMES

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DESCRIPTION OF CONTENTS



1.

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7. OTHER MODELS OF DATA ANALYSIS

WORKLOAD

ACTIVITY	Hours	% To be attended
Computer classroom practice	45,00	100
Theory classes	15,00	100
Attendance at events and external activities	90,00	0
TOTAL	150,00	

TEACHING METHODOLOGY

English version is not available

EVALUATION

English version is not available



REFERENCES

Basic

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- Gil, J.A. (2000). Estadística e informática (SPSS) en la investigación descriptiva e inferencial. Madrid: UNED.
- Goetz, J. P. y Lecompte, M. D. (1988). Etnografía y diseño cualitativo en investigación educativa. Madrid: Morata
- Lizasoain, L. y Joaristi, L. (2003). Gestión y análisis de datos con SPSS. Madrid: Thomson Paraninfo.
- Mafokozi, J. (2009). Introducción a la estadística para gente de letras. Madrid: CCS.
- Martínez-Arias, M.R., Chacón-Gómez, J.C. y Castellanos López, M.A. (2014). Análisis de datos en Psicología y Ciencias de la Salud. Volumen I: Exploración de datos y fundamentos probabilísticos. Madrid: EOS Universitaria
- Martínez-Arias, M.R., Castellanos López, M.A. y Chacón-Gómez, J.C. (2014). Análisis de datos en Psicología y Ciencias de la Salud. Volumen II: Inferencia estadística. Madrid: EOS Universitaria
- Pérez Juste, R., García Llamas, J. L., Gil Pascual, J. A. y Galán González, A. (2009). Estadística aplicada a la educación. Madrid: Pearson-UNED.
- Tejedor Tejedor, F. J. y Etxeberría Murgiondo, J. (2006). Análisis inferencial de datos en educación. Madrid: La Muralla.

Additional

- Botella, J., León, O., San Martín, R. y Barriopedro, I. (2002). Análisis de datos en Psicología I. Madrid: Pirámide.
- Delgado, J. M. y Gutiérrez, J. (1994) Métodos y técnicas cualitativas de investigación en ciencias sociales. Madrid: Síntesis Psicología.
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- Gil Flores, J.; Perera Rodríguez, V (2001): Análisis informatizado de datos cualitativos. Sevilla: Kronos
- Gil, J. (1994). Análisis de datos cualitativos. Aplicaciones a la investigación educativa. Barcelona: PPU.
- Hopkins, K.D., Hopkins, B.R. y Glass, G.V. (1997). Estadística básica para las Ciencias Sociales y del Comportamiento. Allyn & Bacon.
- Martínez Arias, R. (1999). Análisis Multivariante en la Investigación Científica. (Colección: Cuadernos de Estadística nº 1). Madrid: La Muralla.



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- Pardo, A. y Ruiz, M.A. (2005). Análisis de datos con SPSS 13 Base. Madrid: McGraw-Hill.
- Pardo, A., Ruiz, M.A. y San Martín, R. (2009). Análisis de datos en ciencias sociales y de la salud. Vol. I. Madrid: Síntesis.
- Pardo, A. y San Martín, R. (2010). Análisis de datos en ciencias sociales y de la salud. Vol II. Madrid: Síntesis.

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

The essential contents are maintained, in any case, since they are necessary to master the competences linked to this subject, although the length and emphasis can be adapted to the circumstances of each moment.

2.- Volume of work and temporary planning of teaching

The volume of work required to pass this subject is maintained, trying to adapt the procedures and activities to that end.

3.- Teaching methodology

In this subject teaching combines face-to-face with non-attendance, synchronous or asynchronous. The level of attendance will be adapted to the social and health conditions of each moment and to the specific conditions of the subject. It will be a hybrid model, so that the classes will be taught with the possible presence and the rest will be carried out in person. In any case, this hybrid model must necessarily be flexible in order to adapt to the circumstances.

In non-face-to-face teaching, synchronous modalities will be prioritized, which favor direct interaction with students

4.- Evaluation

Continuous assessment activities will be promoted, which, on the other hand, can be combined with the requirement to pass specific activities, including a final global assessment. The details of the process will be specified in the classroom guide, taking into account the circumstances.