



## COURSE DATA

Data Subject	
<b>Code</b>	33487
<b>Name</b>	Educational measurement
<b>Cycle</b>	Grade
<b>ECTS Credits</b>	6.0
<b>Academic year</b>	2020 - 2021

## Study (s)

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

## Subject-matter

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

## Coordination

Name	Department
BAKIEVA KARIMOVA, MARGARITA	270 - Research Methodology, Educational Diagnosis and Assessment
RAMOS SANTANA, GENOVEVA	270 - Research Methodology, Educational Diagnosis and Assessment

## SUMMARY

The socio-educational intervention starting point is the analysis of the situation, the knowledge of people, groups and contexts. There are different techniques for gathering information that will allow us to approach these elements, a more qualitative (subjective) and more quantitative (objective), some more and some less standardized. This course provides theoretical and methodological resources, based on quantitative techniques, to analyze, design and implement measurement processes in education and social contexts, all aimed at improving the socio-educational intervention.



## 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 course is part of the fourth semester of the degree Degree (2nd semester of 2nd year). In terms of content, is directly linked to other subject area of educational research. The subjects of Introduction to Research and Data Analysis provide the framework of the overall research, and provide basic statistical techniques to analyze the data contained in an investigation. Within this overall research process, there is a fundamental step is the collection of information, which requires the use of specific techniques. This issue will be addressed in two subjects: - Educational Measurement: focus on standardized tests. - Methods of data collection: focus on standardized testing or nonstandard part. Additionally, these materials, while allowing technical training regarding the process of collecting information also will be basic in the third degree course will focus on "Evaluation of socio programs and institutions", understood as a process of evaluation type of applied research. From another perspective, the process of gathering information is a fundamental stage in the conception, design, development and evaluation of socio-educational intervention; it is aimed at people, groups or contexts. Therefore, these materials are linked to that along the race based and specify the key issues of socio-educational intervention.

## OUTCOMES

### 1306 - Degree in Social Education

- Have skills for information management.
- Be able to integrate and communicate with experts in other areas and in different contexts.
- 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.
- Identify and make reasoned judgments about socio-educational problems in order to improve professional practice in non-formal contexts.
- Prepare and interpret technical, research and evaluation reports on educational actions, processes and results.



## LEARNING OUTCOMES

Once established the powers intend to work with students to ensure correspondence between the teaching-learning process, activities or tasks and learning products, we defined what students have learned at the end of the subject of Educational Measurement, is that we expect of students learning outcomes. That is, are specific performances and specified performance standards or achievement that demonstrate mastery of skills and are geared towards what the student learns in what he is capable of doing and showing. These are: R1. To know how to do a technical revision process a standardized instrument or test R2. To develop and interpret a process of statistical analysis of an objective test by calculating and interpreting its metric characteristics: a. To know how to calculate and interpretate an standardized instrument or test items reliability and validity; b. To know how to calculate and interpretate the whole instrument or test reliability and validity. R3. To write a socio-educational report in which the usefulness of the educational measurement processes in its realization is understood.

## DESCRIPTION OF CONTENTS

### 1. 1. Introduction to educational measurement.

- 1.1. Educational measurement in the process of socio-educational intervention.
- 1.2. Measurement models: Normative, Behavioral Assessment and Criterion Assessment.
- 1.3. The tests as measurement scales.
- 1.4. Some scales used in the socio-educational field.

### 2. 2. The tests as measurement scales.

- 2.1. Test concept
- 2.2. Test types
- 2.3. Features, Advantages and Disadvantages
- 2.4. Process of elaboration of a scale for the socio-educational field: Phases in the construction of a test.

### 3. 3. Evidence quality criteria.

- 3.1. Construct delimitation
- 3.2. Technical Quality Criteria of the Items: Logical Review. Empirical Review.
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- 3.3. Technical Quality Criteria of the scale-test: Reliability. Validity



## WORKLOAD

ACTIVITY	Hours	% To be attended
Theory classes	30,00	100
Computer classroom practice	30,00	100
Attendance at events and external activities	5,00	0
Development of group work	10,00	0
Development of individual work	5,00	0
Study and independent work	20,00	0
Readings supplementary material	5,00	0
Preparation of evaluation activities	18,00	0
Preparing lectures	5,00	0
Preparation of practical classes and problem	15,00	0
Resolution of case studies	5,00	0
Resolution of online questionnaires	2,00	0
<b>TOTAL</b>	<b>150,00</b>	

## TEACHING METHODOLOGY

The teaching methodology is based on the development of content through a close connection between theory and practice, combining both group work and collaborative and individual work though:

- Participatory the lecture. Theoretical explanation of the teacher as a working guide.
- Group learning tasks to solve.
- Autonomous Learning to solve individual tasks, such as reading articles, individual reflection and argument...
- Group and individual tutorials: personal attention to students.
- Using the virtual platform of the University training- Virtual Classroom, to facilitate student access to all necessary resources for the development of the teaching-learning material (Teaching guide, activities/tasks, agenda, questionnaires, portfolios, evaluation...) and to facilitate communication between students and between students and the teacher.
- Involvement of specific and general seminars related to the contents of the subject.



- Joint/cross with students of other subjects on cross-cutting themes of the training entitled. MATERIALS a) Academic Guide: specifies the objectives, content, workload distribution issues, methodology, evaluation, and bibliography. b) Bibliography: required reading, given in the same Academic Guide. c) Resolution of practical activities proposed by professors. All the materials and activities will be located in the virtual classroom- Moodle- of the subject. d) Other: How much relevant information can provide students their own initiative. Report that a cross, present throughout the area, will be the use of computing resources: the technological platform of the University-Virtual-Classroom, Internet, Open Office, Microsoft Office (Word, Excel, PowerPoint) Electronic Resources (Databases, Library Books, journals, ...); Statistical Package for the Social Sciences Package for Windows (SPSS), PSPP y/o Jamovi®. The use of each will be specified in each learning activity specifically.

## EVALUATION

They employ different evaluation procedures for evaluating joint acquisition of different skills involved. Each of these procedures must be approved in order to pass the subject. Each of these activities has to be overcome with a value of 5 points out of 10 for the weighting is made and can be overcome total loans of the subject. Exam 45% Practices 45% Self-Assessment 10% There is no difference in the evaluation procedure between the first and the second call. The sections of the evaluation are recoverable on second call.

## REFERENCES

### Basic

- Gil Pascual, Juan A. (2016). Técnicas e instrumentos para la recogida de información. Madrid: UNED
- Castillo, Santiago y Cabrerizo, Jesús. (2003). Evaluación de programas de intervención socioeducativa: agentes y ámbitos. Madrid: Pearson (Capítulo IV. Técnicas e instrumentos de recogida de información para la evaluación de programas, agentes y ámbitos de intervención socioeducativa).
- Delgado, Carmen (2014). Viajando a Itaca por mares cuantitativos. Amaru Ediciones.
- García Ferrando, Manuel.; Ibañez, Jesús. y Alvira, Francisco. (2003). El análisis de la realidad social: métodos y técnicas de investigación. Madrid: Alianza. (Capítulo 9. Medir en ciencias sociales).
- InnovaMIDE. Introducción al SPSS. <https://www.uv.es/innovamide/spss/>
- López, Pedro y Pacheli, Sandra. (2015). Metodología de la investigación socialcuantitativa. Bellatera. Universitat Autónoma de Barcelona: Barcelona Recuperado de <http://ddd.uab.cat/record/129382>
- Martínez, Mónica y Marín, Juan Antonio. (2009). Como Medir y Guiar Cambios hacia Entornos Educativos más Motivadores. Formación Universitaria, (2), 4, 3-14. Recuperado de <https://scielo.conicyt.cl/pdf/formuniv/v2n4/art02.pdf>
- Navas, María José (2012). La medición en el ámbito educativo. Revista Psicología educativa (18), 1, pp. 15-28. ISSN 1135-755X



### Additional

- Exteberria, Ignacio Javier y Tejedor, Francisco Javier (2005). Análisis descriptivo de datos en educación. Madrid: la Muralla.
- Folgueiras, Pilar, y Ramírez, Chenda. (2017). Elaboración de técnicas de recogida de información en diseños mixtos. Un ejemplo de estudio en aprendizaje-servicio. Reire: revista d'innovació i recerca en educació (10) 2.
- Mafokozi, Joseph (2011). Introducción a la estadística: para gente de letras. Madrid. CCS.
- Muñiz, José. (coord) (2005). Análisis de ítems. Madrid: La Muralla.
- Parrilla Latas, Ángeles (2017). Ética para una investigación inclusiva. Revista de Educación Inclusiva, 3(1).
- Sandín, Mª. Paz (2000). Criterios de Validez en la investigación educativa: de la objetividad a la solidaridad. Revista de Investigación Educativa, 18 (1), 223-242
- Suárez, Jesús M. y Jornet, Jesús, M. (1990). Reflexiones en torno a la validación de pruebas psicométricas y edumétricas: Un acercamiento ecléctico. Revista de Investigación Educativa, 8(16), 517-526.

### ADDENDUM COVID-19

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

#### ACORD CAT

"Es garanteix a l'estudiantat que, de ser necessari, s'adaptarà la modalitat d'impartició de la docència (en línia, híbrida o presencial), així com la modalitat de l'avaluació, a les exigències sanitàries formulades per les autoritats competents, mantenint els paràmetres habituals d'avaluació prevists en les guies i sense que això supose una càrrega addicional en el treball de l'alumnat".

#### 1. Continguts / Contenidos

Se mantienen los contenidos inicialmente recogidos en la guía docente

#### 2. Volumen de trabajo y planificación temporal de la docencia

Sesiones programadas en las mismas fechas y horas con la misma duración



### 3. Metodología docente

- Subida de materiales al Aula virtual
- Propuesta de actividades por aula virtual
- Videoconferencia síncrona (Blackboard o Teams) para formación híbrida
- Transparencias locutadas, aclaración conceptos y temario
- Ejercicios resueltos (para clases prácticas)
- Tutorías individuales y grupales mediante correo electrónico, videoconferencia, Skype...
- Forum en Aula Virtual para aclaración de conceptos, dudas temario, prácticas...

### 4. Evaluación

- Adición de tareas de evaluación continua
- Incremento del peso en la nota final de la evaluación continua
- Pruebas de evaluación mediante trabajos académicos
- Pruebas objetivas (tipo test) en aula virtual

En esta asignatura se realizarán cambios en la ponderación. Concretamente los cambios afectan a la evaluación continua reduciendo el peso del examen final e incorporando más peso la evaluación continua. Finalmente la evaluación de esta materia se compondrá de los siguientes elementos:

- Examen (prueba objetiva tipo test online con recursos moodle): 30%
- Tareas no presenciales en moodle para adquisición de conocimiento teórico y de prácticas (15%)
- Prácticas (45%)
- Autoevaluación. Cuestionario online (10%)

### 5. Bibliografía

La bibliografía y los recursos online recomendados se mantiene pues son accesibles