COURSE DATA

DATA SUBJECT

Code: 42682
Name: Statistics
Cycle: Master's Degree
ECTS Credits: 3
Academic year: 2026-27

STUDY (S)

Degree	Center	Acad. year	Period
2124 - Master's Degree in Public Health and Healthcare Management	Facultat de Farmàcia i Ciències de l'alimentació	1	First quarter

SUBJECT-MATTER

Degree	Subject-matter	Character
2124 - Master's Degree in Public Health and Healthcare Management	Methodology in public health	COMPULSORY

COORDINATION

IÑIGUEZ HERNANDEZ MARIA DEL CARMEN

SUMMARY

In this introductory course to statistics is intended that students learn aspects related to the basic concepts of Uncertainty, Probability and Sampling. The student must also understand key aspects of demography and descriptive and inferential statistics. The student must distinguish the different types of statistical analysis that can be found in the field of Public Health.

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PREVIOUS KNOWLEDGE

RELATIONSHIP TO OTHER SUBJECTS OF THE SAME DEGREE

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

OTHER REQUIREMENTS

The recommended profile is the person in possession of an official Spanish university degree or a certificate issued by an institution of higher education in the European Higher Education Area that entitle the issuing country for access to Master's teachings. Also, can also access the graduates from educational systems outside the European Higher Education Area without the approval of their qualifications, upon

verification by the University that those certify a level of education equivalent to the corresp

COMPETENCES / LEARNING OUTCOMES

2124 - Master's Degree in Public Health and Healthcare Management

Be able to integrate into teams, both as managers or coordinators and for specific and limited functions and in support of the team or of others.

Capacidad de integrar las nuevas tecnologías en su labor profesional y/o investigadora.

Capacidad para aplicar los conocimientos adquiridos a la resolución de problemas en salud pública.

Capacidad para formular una hipótesis, diseñar y desarrollar un proyecto de investigación.

Capacidad para integrar conocimientos y enfrentarse a la complejidad de formular juicios y tomar decisiones a partir de una información que, en muchas ocasiones es incompleta o limitada, e incluya reflexiones sobre las responsabilidades sociales y éticas vinculadas a la aplicación de sus conocimientos y juicios.

Capacitarlo para trabajar en equipos multidisciplinares reproduciendo contextos reales y aportando y coordinando los propios conocimientos con los de otras ramas e intervinientes.

Comprender los fundamentos de los métodos estadísticos y epidemiológicos, en general y aplicados a problemas específicos de salud.

Conocer el proceso de investigación científica en Salud Pública.

Conocer la organización del sistema sanitario español y las principales diferencias y similitudes a nivel autonómico.

Conocer los conceptos propios de la medicina preventiva, la epidemiología, y la salud pública, su relación con el contexto socioeconómico y su evolución a lo largo del tiempo.

Critically analyze both his/her work and that of the colleagues.

Dotarles de práctica en las técnicas de exposición oral, escrita, presentaciones, paneles, etc- para comunicar sus conocimientos, propuestas y posiciones.

Elaborar hipótesis de trabajo basadas en antecedentes bibliográficos y experimentales y de diseño.

Identificar y priorizar los determinantes de salud y los estilos de vida saludable de una población.

Participate in, lead and coordinate debates and discussions, be able to summarize them and extract the most relevant conclusions accepted by the majority.

Poder aplicar sus conocimientos sobre problemas concretos y saber resumir y extractar los argumentos y las conclusiones más relevantes para su resolución.

Preparar y presentar resultados en seminarios y los elementos básicos de la comunicación.

Saber trabajar en equipo con eficacia y eficiencia, y con capacidad de comunicación social.

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

Students should be able to integrate knowledge and address the complexity of making informed judgments based on incomplete or limited information, including reflections on the social and ethical responsibilities associated with the application of their knowledge and judgments.

Students should communicate conclusions and underlying knowledge clearly and unambiguously to both specialized and non-specialized audiences.

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.

DESCRIPTION OF CONTENTS

1. Statistics

-Probability and Sampling.
-Descriptive statistics.
-Demographics and demographic analysis.
-Statistical Inference.
-Regression Analysis.
-Logistic regression and survival analysis.

WORKLOAD

PRESENCIAL ACTIVITIES

Activity	Hours
Theory	24,00
Total hours	**24,00**

NON PRESENCIAL ACTIVITIES

Activity	Hours
Attendance at other activities	0,00
Individual or group project	20,00
Independent study and work	15,00
Preparation of lessons	0,00
Preparation for assessment activities	6,00
Resolution of case studies	10,00
Total hours	**51,00**

TEACHING METHODOLOGY

Theoretical lessons

Resolution of practical cases

Resolution of problems

Work aided in computer classroom

Work in groups tutorized

Projects development

EVALUATION

Delivery and evaluation of practical exercises: 60 %
Theoretical and practical exam. Weight: 40 %
Attendance and participation in classes will be considered with a valuation of up to half of the exam evaluation.

REFERENCES

- Armitage, P. y Berry, G. (1997). Estadística para la Investigación Biomédica. Ed. Doyma.
- Daniel, W.W. (1995). Bioestadística: Base para el análisis de las ciencias de la salud.. Noriega.
- Martín Andrés, A. y Luna del Castillo, J.D. (1995). 50±10 horas de bioestadística. Ed. Norma.
- Milton, J. S. (1994). Estadística para biología y ciencias de la salud. Interamericana-McGraw-Hill.
- Sokal, R.R. y Rohlf, F.J. (1995). Biometry. W.H. Freeman and Co.