COURSE DATA

DATA SUBJECT

Code: 42683
Name: Epidemiology and qualitative techniques
Cycle: Master's Degree
ECTS Credits: 4
Academic year: 2025-26

STUDY (S)

Degree	Center	Acad. year	Period
2124 - Master's Degree in Public Health and Healthcare Management	Facultat de Farmácia 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

ZURRIAGA LLORENS ÓSCAR ERNESTO

SUMMARY

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

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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. Epidemiology

Introduction to epidemiology. The scientific method. Public Health and Epidemiology research methodology.
Measures of morbidity and mortality. Frequency measurements. Rate standardization.
Measures of association and impact. Risk. Risk and protection factors. Measures of risk. Statistical association, effect size, and accuracy.
Design of epidemiological studies. Types of studies.
Case series, cross-sectional studies, and ecological studies.
Case-control studies.
Cohort studies.
Intervention surveys: Experimental and quasi. Community Essays. Animal experiments. Clinical trials.
Meta-analysis. Analytical reviews of studies.
Errors in epidemiological studies. Validity and reproducibility. Random errors. Systematic errors: bias. Confounding and interaction.
Spatial analysis in epidemiology.
Screening and evaluation of diagnostic tests.
Computer software: applications to epidemiology.

2. Qualitative Techniques

Theoretical and scope of qualitative methodology. Design, sampling and selection of information sources.
Information gathering techniques.
Analysis and interpretation of information.
Presentation and evaluation of qualitative research.
Qualitative methodology: practical applications.
Consensus methods. Nominal Group Technique, Delphi, and others.

WORKLOAD

PRESENCIAL ACTIVITIES

Activity	Hours
Theory	32,00
Total hours	**32,00**

NON PRESENCIAL ACTIVITIES

Activity	Hours
Attendance at other activities	4,00
Individual or group project	10,00
Independent study and work	20,00
Preparation of lessons	9,00
Preparation for assessment activities	15,00
Resolution of case studies	10,00
Total hours	**68,00**

TEACHING METHODOLOGY

Theoretical lessons.

Reading and discussion of documents.

Resolution of practical cases.

Resolution of problems.

Problem solving.

Work aided in computer classroom.

Work in groups tutorized.

Projects development .

Seminars .

EVALUATION

Theory assessment. 85%

Attendance and participation in classes. 15%

REFERENCES

- Detels R, Beaglehole R, Lansang MA, Gulliford M (eds). Oxford textbook on Public Health. Oxford University Press Inc, 2009.

- Sierra López A, Saénz González MC, Fernández-Créhuet Navajas J, Salleras Sanmartí L, Cueto Espinar A, Gestal Otero J, Domínguez Rojas V, Delgado Rodríguez M, Bolumar Montrull F, Herruzo Cabrera R, Serra Majem L (dirs.). Medicina Preventiva y Salud pública. 11ª ed. Barcelona: Elsevier- Masson, 2008.

- Argimón JM, Jiménez J, Ed. Métodos de investigación clínica y epidemiológica. Barcelona: Harcourt, 2004.

- Fletcher RH, Fletcher SW, Wagner EH. Epidemiología Clínica. 2ª ed. Madrid: Elsevier Masson, 2007

- Peiró S, Portella E. El grupo nominal en el entorno sanitario. Valencia: Institut Valencià dEstudis en Salut Pública, 1993.

- Patton MQ. Qualitative evaluation and research methods. 3ª ed. California: Sage Publications, 2002.

- Delgado JM, Gutiérrez J (Ed). Métodos y técnicas cualitativas de investigación en ciencias sociales. Madrid: Síntesis Psicología, 1994.

- Amezcua M, Gálvez Toro A. Los modos de análisis en investigación cualitativa en salud: perspectiva crítica y reflexiones en voz alta. Rev Esp Salud Pública. 2002; 76: 423-36.