

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

Code: 42688
Name: Health monitoring
Cycle: Master's Degree
ECTS Credits: 3
Academic year: 2025-26

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	Promotion of good health and disease prevention	COMPULSORY

COORDINATION**SUMMARY**

The concept and implementation of public health surveillance will be addressed in depth both methodological and practical aspects.

One of the topics will be the basic concepts, methodology and evaluation of surveillance systems and the basic procedures of notification, surveillance and disease control.

The systems used in the registries of diseases and patients, design, planning and evaluation, will be covered as well as the procedures used. The concept, principles, methods and characteristics of the sentinel networks will be studied. The health surveys systems in its different aspects will receive attention from the theoretical and application.

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.

Comprender los principios de la planificación sanitaria y el diseño y la evaluación de programas de salud para población general y con necesidades especiales.

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.

Conocer los fundamentos de las principales estrategias de prevención de la enfermedad, protección y promoción de la salud actualmente disponibles.

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 planes para analizar la situación de la salud de la comunidad.

Elaborar programas para gestionar y evaluar servicios sanitarios.

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 extraer los argumentos y las conclusiones más relevantes para su resolución.

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

Ser competente para intervenir en situaciones de emergencia sanitaria.

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. Health Surveillance

Public health surveillance: concept
Methodology, evaluation of surveillance systems. Attributes of a surveillance system. Collection and surveillance information analysis.
Reporting, surveillance and disease control. The basic system of epidemiological surveillance network. The role of laboratory surveillance. Control and eradication.
Disease registers and patients registries. Population registries and clinical databases. Design, planning and evaluation of registries. Inventory of registers. Confidentiality and privacy in the registries. Procedures in a registry
Sentinel networks. Concept. Principles and methods. Features. Profile of health problems recorded on a sentinel network
Health surveys.

WORKLOAD

PRESENCIAL ACTIVITIES

Activity	Hours
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Theory	24,00
Total hours	24,00

NON PRESENCIAL ACTIVITIES

Activity	Hours
Attendance at other activities	2,00
Individual or group project	10,00
Independent study and work	15,00
Preparation of lessons	9,00
Preparation for assessment activities	10,00
Resolution of case studies	0,00
Total hours	46,00

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. Minimum weight: 40% Maximum Weight: 40%

Practicum Test. Minimum weight: 30%. Maximum weight: 30%

Assessing individual work, minimum Weighting: 5% Maximum Weight: 15%



Assessing group work. Minimum weight: 5% Maximum Weight: 15%

Attendance and participation lectures. Minimum weight: 5% Maximum Weight: 15%

Attendance and participation practical classes. Minimum weight: 5% Maximum Weight: 15%

Delivery of practical work. Minimum weight: 5% Maximum Weight: 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.
- Teutsch SM, Churchill RE. Principles and practice of public health surveillance. 2nd ed. New York: Oxford University Press Inc, 2000
- Martínez Navarro F. Vigilancia Epidemiológica. Madrid: McGraw-Hill Interamericana, 2004
- Jensen OM, Parkin DM, MacLennan R, Muir CS, Skeet RG. Registros de cáncer. Principios y métodos. Lyon: IARC. Publicaciones científicas N°95, 1995
- Navarro Rubio M. Encuestas de Salud (Volumen 11 de Cuadernos Metodológicos) Madrid: Centro de Investigaciones Sociológicas, 1994
- Newton J, Gardner S. Disease registers in England. Oxford: Institute of Health Sciences, 2002.
- Aday LU, Cornelius LJ. Designing and Conducting Health Surveys: A Comprehensive Guide. San Francisco, California: Jossey-Bass Inc. Publishers, 1996.