COURSE DATA

DATA SUBJECT

Code: 42684
Name: Protocols of research and scientific publication
Cycle: Master's Degree
ECTS Credits: 3.5
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

MARTIN MORENO JOSE MARIA

SUMMARY

This course aims to provide the student the knowledge, skills and attitudes required to rigorously design and disseminate a research study, focusing in four main related issues. First, the relevance and originality of a research topic on the basis of existing scientific knowledge on this subject (literature search). Secondly, the study methodology including a proper description of hypothesis and objectives, design and general methods of research, the variables of interest, tools necessary to collect the relevant information in fieldwork, strategies needed to address potential limitations in the implementation and interpretation of the results of the study, and ethical issues that may affect the research in all its phases (research protocols). Thirdly, the implementation and dissemination of the study so that this can influence decision-makers and stakeholders identified as potential beneficiaries of the research process and its results (dissemination of research studies). And finally, the rigorous presentation of the study in proper media to the scientific community, including conferences and scientific journals (scientific publication). The course will also address the basics of the scientific method, the needs of research in the field of public health and healthcare management and opportunities for funding of research in our context.

PREVIOUS KNOWLEDGE

RELATIONSHIP TO OTHER SUBJECTS OF THE SAME DEGREE

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

OTHER REQUIREMENTS

Not recommeded

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. Research basics

Introduction to the scientific method.
Qualities of the researcher.
Centers and structures in public health research in Spain.
Sources of research financing.
Research priorities in public health.

2. Rationale of the study: bibliographic search

The research question.
The search question.
Sources of bibliographic information in public health: scientific journals, bibliographic repertories. Other information resources: statistical bases and official records, reports, grey literature.

3. Research protocols

Rationale and justification of the study. Formulation of hypotheses and objectives. Setting of the study. Methodological design. Types of variables. Characterization of the variables of interest. Field work: studies based on primary data. Studies based on secondary data. Validity of the measurement tools. Forecast of limitations in the study. Ethical aspects of research. Time schedule. Composition of a research team. Design of a research budget.

4. Research transfer

Concept and types of research transfer. Identification of the audiences of interest. Elaboration of the messages to be disseminated. Alliances and messengers for the transfer. Methods for research transfer. Evaluation of research transfer.

5. Scientific publication: scientific journals

Types of scientific papers. The original article: structure, content (title, signature, summary, keywords, introduction, methods, results, discussion, references, other sections). How to choose a journal for publication. How to prepare and submit a manuscript for publication. The publishing process: editorial process, external review of manuscripts, decision criteria. Ethical issues in scientific publishing (authorship, repeated publication, conflict of interest).

6. Oral presentations of research

Congresses and scientific meetings in the field of public health. Preparation of a summary for a presentation at a scientific meeting. Preparation of oral communication for a scientific meeting: organization of the contents, format. Preparation of a poster or poster for a scientific meeting. Oral presentations: what to do for a good presentation (before, during and after).

WORKLOAD

PRESENCIAL ACTIVITIES

Activity	Hours
Theory	28,00
Total hours	**28,00**

NON PRESENCIAL ACTIVITIES

Activity	Hours
Attendance at other activities	2,00
Individual or group project	14,00
Independent study and work	15,00
Preparation of lessons	13,00
Preparation for assessment activities	10,50
Resolution of case studies	0,00
Total hours	**54,50**

TEACHING METHODOLOGY

Theoretical and participative lessons

Reading and discussion of documents

Resolution of practical cases

Problem solving

Supervised work in computer classroom

Supervised work in groups

Projects development

Seminars

Individual tutoring

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 in lectures. Minimum weight: 5% Maximum Weight: 15%

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

Delivery of practical work. Minimum weight: 5% Maximum Weight: 15%

REFERENCES

- Guía para hacer búsquedas bibliográficas. Instituto de Ciencias de la Salud; 2012. Disponible en: http://ics.jccm.es/uploads/media/Guia_para_hacer_busquedas_bibliograficas.pdf

- Rodríguez del Águila MM, Pérez Vicente S, Sordo del Castillo L, Fernández Sierra MA. Cómo elaborar un protocolo de investigación en salud. Med Clin (Barc). 2007;129(8):299-302.

- Jiménez Villa J, Argimon Pallàs JM, Martín Zurro A, Vilardell Tarrés M. Publicación científica biomédica. Cómo escribir y publicar un artículo de investigación. Barcelona: Elsevier España; 2010.

- Mohamed M. F. Fathalla. A Practical Guide for Health Researchers. WHO Regional Publications Eastern Mediterranean Series 30. Cairo: World Health Organization; 2004. Disponible en: http: //applications.emro.who.int/dsaf/dsa237.pdf

- Bosch F, Mabrouki K, coordinadores. Redacción científica en biomedicina: lo que hay que saber. Cuadernos de la Fundación Dr. Antonio Esteve n. 9. Barcelona: Fundación Dr. Antonio Esteve; 2007. Disponible en: http://www.esteve.org

- Serés E, Rosich L, Bosch F, coordinadores. Presentaciones orales en biomedicina. Cuadernos de la Fundación Dr Antonio Esteve n. 20. Barcelona: Fundación Dr. Antonio Esteve; 2010. Disponible en: http://www.esteve.org

- Khoury MJ, Gwinn M, Ioannidis JPA. The Emergence of Translational Epidemiology: From Scientific Discovery to Population Health Impact. Am J Epidemiol. 2010;172:517524.

- Reardon R, Lavis J, Gibson J. From Research to Practice: A Knowledge Transfer Planning Guide. Toronto: Institute for Work and Health; 2006. Disponible en: http://www.iwh.on. ca/system/files/at-work/kte_planning_guide_2006b.pdf