

**COURSE DATA****Data Subject**

Code	34507
Name	Production, publication and difusion of research results
Cycle	Grade
ECTS Credits	4.5
Academic year	2019 - 2020

Study (s)

Degree	Center	Acad. year	Period
1204 - Degree in Medicine	Faculty of Medicine and Odontology	5	First term

Subject-matter

Degree	Subject-matter	Character
1204 - Degree in Medicine	18 - Optional subjects	Optional

Coordination

Name	Department
ABAD GARCIA, MARIA FRANCISCA	225 - History of Science and Documentation

SUMMARY

The teaching in this subject is meant for students to become familiar with aspects regarding scientific research and its processes, to be able to compile publications in which students can disseminate results found to the scientific community. The main objective is that students not only acquire basic knowledge for compiling scientific work, but that they also develop necessary skills for their professional practise and acquire them at the end of their learning process.

PREVIOUS KNOWLEDGE**Relationship to other subjects of the same degree**

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



Other requirements

OUTCOMES

1204 - Degree in Medicine

- Students must be able to apply their knowledge to their work or vocation in a professional manner and have acquired the competences required for the preparation and defence of arguments and for problem solving in their field of study.
- Students must have the ability to gather and interpret relevant data (usually in their field of study) to make judgements that take relevant social, scientific or ethical issues into consideration.
- Know how to use IT in clinical, therapeutic and preventive activities, and those of research.
- Be able to formulate hypothesis, gather information and evaluate it critically in order to solve problems by following the scientific method.
- Proper organisation and planning of the workload and timing in professional activities.
- Team-working skills and engaging with other people in the same line of work or different.
- Criticism and self-criticism skills.
- Capacity for communicating with professional circles from other domains.
- Acknowledge diversity and multiculturality.
- Consideration of ethics as a fundamental value in the professional practise.
- Working capacity to function in an international context.

LEARNING OUTCOMES

Once the module is finished, students will be able to:

- Be acquainted with the aspects of communication.
- Do an oral presentation in front of an audience.
- Compile scientific work and professional records.
- Be acquainted with new mechanisms for publication and dissemination of scientific information.



DESCRIPTION OF CONTENTS

1. SIENTIFIC PUBLICATIONS IN BIOMEDICINE.

The role of scientific publications.

Publications as a measure of results found in research.

Pressure to publish.

Ethics of scientific publication.

Types or scientific articles.

Introduction to research work. Academic work, final projects and PhD thesis.

2. ORGNISING RESEARCH WORK.

Literature review.

Establishment of hypothesis and objectives.

Define the type of research work and its design.

Definition of the variables.

Data compilation methods.

Planning the analysis of results found.

3. MANAGEMENT AND EXPLOITATION OF BLIBLIOGRAPHIC INFORMATION IN SCIENTIFIC RESEARCH.

Need for recognising other authors publications.

The concept of plagiarism and its different types.

Quoting: incorporation of texts and ideas by other authors.

Types of quoting: literal quoting, paraphrasing and abstracts.

Norms for quoting.

Operators of bibliographic references. Definition and reasons to use them.

4. BIBLIOGRAPHY REVIEW. REVISION WORK.

Search of bibliographic information in scientific work.

The background section.

Systematic search of literature in revision work.

Types of revision work.

Compilation, documentation and analysis of results found in systematic search of revision work.

**5. WRITING SCIENTIFIC WORK I**

General aspects regarding structures of original scientific articles. The IMRAD structure.

Order of the text.

Correspondence between the parties in scientific work.

Argumentation, style of writing and verb tenses.

6. WRITING SCIENTIFIC WORK II

Titles for scientific work. Characteristics and types of titles.

Writing an introduction: the rhetorical structure of Swales.

Writing the material and method chapter.

Writing the results chapter.

Writing the discussion chapter.

Bibliography chapter.

7. PUBLICATION AND DISSEMINATION OF SCIENTIFIC ARTICLES.

Publication of an article in a scientific magazine.

The publishing process. Definition and types.

Transfer of economic rights (copyright).

Implications of transferring economic rights when reusing certain information.

Dissemination of published information. Data bases, repositories, academic networks.

WORKLOAD

ACTIVITY	Hours	% To be attended
Theory classes	19,00	100
Seminars	12,00	100
Computer classroom practice	10,00	100
Tutorials	4,00	100
Attendance at events and external activities	5,00	0
Development of group work	10,00	0
Development of individual work	15,00	0
Readings supplementary material	10,00	0
Preparation of evaluation activities	11,00	0
Preparing lectures	10,00	0
Preparation of practical classes and problem	4,00	0
Resolution of case studies	2,50	0
TOTAL	112,50	



TEACHING METHODOLOGY

In theoretical lessons, professors will present the most important concepts and content through master classes in a structured way, so that students achieve several skills and meet the objectives. Students' participation in the class should be encouraged. They will have access to the didactic material professors have used, if they consider it to be appropriate, through the electronic platform *Aula Virtual*.

Attendance to practical classes: consisting of seminars and exercises in the computer room where students will be able to analyse practical cases and work on projects. Students should apply in new classes the contents they learnt individually in previous lessons.

EVALUATION

Theoretical assessment: Executed in the form a written test, the questions of which may be combined (short questions and multiple-choice ones) and which will prove knowledge acquisition during the academic year. Choosing three incorrect answers will penalise a correct one (i.e. leading to a negative mark). Questions left blank will not be penalised. These result will constitute 50% of the final mark.

Practical assessment: students will be required to create a project (group work) which will make up 50% of the final mark.

Individual assessment in every practise is compulsory, and attendance (at least to 80% of all classes) will be necessary to pass. Moreover, students should obtain at least 3 points in their evaluation in order to pass the module.

In this subject students will not be allowed to write their test if they have not completed their training (internship).

Attendance of practices will be compulsory.

REFERENCES

Basic

- Abad García MF; González Teruel A; Martínez Catalán C (2006). Acceso abierto y revistas médicas españolas. *Medicina Clínica*, 127 (12): 456-64
- Abad-García MF, R Melero, E Abadal, A González-Teruel. Autoarchivo de artículos biomédicos en repositorios de acceso abierto. *Rev Neurol* 50, 431-40



- Aleixandre Benavent R, González Alcaide G; González de Dios J, Adolfo Alonso A (2011). Fuentes de información bibliográfica I. Fundamentos para la realización de las búsquedas bibliográficas. Acta Pediátrica Española. 69 (3) 131-136.
- Alfonso F et al. Políticas de conflictos de intereses y requisitos para su declaración en las revistas cardiovasculares nacionales de la Sociedad Europea de Cardiología/. Rev. Esp. Cardiol. 2012;65(5):471478
- Argimón JM. Jiménez A, Martín Zurro A, Vilardell M (2010). La literatura científica biomédica. En: Jiménez Villa J, Argimón Pallás JM, Martín Zurro A, Vilardrell M .Publicación científica biomédica. Como escribir y publicar un artículo de investigación. Barcelona, Elsevier. Pags 1-13
- Argimón JM. Estructura del artículo original. En: Jiménez Villa J, Argimón Pallás JM, Martín Zurro A, Vilardrell M. Publicación científica biomédica. Como escribir y publicar un artículo de investigación. Barcelona, Elsevier. Pags 37-55
- Bobenrieth Astete MA (1998). Las etapas del proceso de investigación y la escritura del artículo científico original. En Burgos R. Metodología de investigación y escritura científica en Clínica. Granada: Escuela Andaluza de Salud Pública. Pags 311-324
- Comité Internacional de Revistas Médicas (2011). Requisitos de uniformidad para manuscritos enviados a revistas biomédicas. Disponible en <http://www.metodo.uab.cat/>. [Fecha de consulta 16 enero 2012]
- Day R. A., (1996). El proceso de arbitraje. En: Cómo escribir y publicar trabajos científicos. Tercera edición. Washington. OPS
- Eduteka (2002). El plagio: qué es y como se evita. Disponible en <http://www.eduteka.org/PlagioIndiana.php3>. [Fecha de consulta 16 enero 2012]
- Lorenzo S, Carrasco G. El sistema de revisión por expertos (peer review) en las revistas científicas: ventajas y limitaciones. En: Publicación científica biomédica. Como escribir y publicar un artículo de investigación. Barcelona, Elsevier. Pags 291-307
- Primo Peña E, Estrada_lorenzo JM (2009). Las bases de datos bibliográficas españolas, un instrumento para el conocimiento y la difusión de la producción científica. Seminarios de la fundación española de Reumatología. Disponible en www.elsevier.es/en/node/2080681. [Fecha de consulta 16 enero 2012].
- Trueba-Gómez R, Estrada Lorenzo (2010). La base de datos Pubmed y la búsqueda de información científica. Semin Fund Esp Reumatol;11 (2):49-63.
- UNED. Herramientas de análisis de la actividad investigadora: Factor de impacto de las publicaciones periódicas e índices de citas. Disponible en: http://www.uned.es/biblioteca/guia_rapida/herramientas_analisis.htm[Fecha de consulta 6 Noviembre 2012].
- Vercelli, A. Creative Commons y la profundidad del copyrigt. Disponible en: http://eprints.rclis.org/handle/10760/9970#.TxRRAsmF_St [Fecha de consulta 16 enero 2012].



Additional

- VIDEO: CONSECUCION DE FINANCIACIÓN DE LA INVESTIGACIÓN BIOMÉDICA
http://www.youtube.com/watch?v=DrIGD2Dwb7A&feature=share&list=PLmquZD2sO_g5yWRW7IE5j6Fyx80UM8
- VIDEO. Consideraciones antes de realizar un proyecto de investigación
http://www.youtube.com/watch?v=M6CVzfjZxbo&feature=share&list=PLmquZD2sO_g5yWRW7IE5j6Fyx80UM8
- VIDEO. LA PREGUNTA A INVESTIGAR
http://www.youtube.com/watch?v=DJXpagArF4A&feature=share&list=PLmquZD2sO_g4_-tj1q-ZjNhr3i64iETgT
- VIDEO. Autoria científica
http://www.youtube.com/watch?v=gYG743pRUWw&feature=share&list=PLmquZD2sO_g7K1B8W9kzkjUTOML-N3nu6
- VIDEO. Seleccionar revista científica.
http://www.youtube.com/watch?v=bviOEWXQ7fc&feature=share&list=PLmquZD2sO_g7K1B8W9kzkjUTOML-N3nu6

ADDENDUM COVID-19

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

English version is not available