

Writing Science (MInvB)

Guía docente 2023-24

PRESENTACIÓN

Breve descripción: This course is designed to equip participants with the basic knowledge and skills to allow them in the future to engage independently in the process of publishing scientific research articles in English.

• Titulación: Master in Biomedical Research

• Módulo/Materia: Module I. Basic

• ECTS: 2.5 ECTS

• Curso, semestre: 1° - 2nd semestre

• Carácter: Obligatory

• **Profesorado**: Prof. Dr. Ruth Breeze (rbreeze@unav.es), Prof. Dr. Javier Carmona (ficarmona@external.unav.es)

• Idioma: English

• Aula: 31 Edificio Biblioteca de Ciencias

• Horario: Calendario del Máster

COMPETENCIAS

Basic competences

- BC6: Possess and understand knowledgeable facts that serve as a basis or opportunity for being original in the development and/or application of ideas, frequently within the context of research.
- BC7: The students will be able to apply acquired knowledge and problem solving abilities to fields outside this program, including that which is new and scarcely known, within a more ample or multidisciplinary context related to the research, development and innovation of drugs.
- BC8: The students will be able to integrate concepts and manage the complex task of drawing valid conclusions from information which, in spite of being incomplete or limited, includes reflections regarding social and ethical responsibilities linked to the application of general knowledge, specific concepts and common sense to the research, development and innovation of drugs.
- BC9: The students will learn to relay their conclusions -and the most recent facts and reasoning supporting said conclusions- to specialized personnel and to the general public in a clear and precise manner.
- BC10: The students will have acquired learning abilities that will permit them to continue studying in a self-directed and autonomous manner.

General competences

- CG1: Ability to deal with biomedical challenges in depth, from different viewpoints, identifying the state of present-day science.
- CG2: Identification of significant questions or hypotheses regarding biomedical issues or problems and definition of the steps necessary to resolve such questions.
- CG3: Possession of creative ability and originality in order to be able to respond to the questions raised in biomedical research.
- CG4: Ability to select and use appropriate techniques in order to efficiently and accurately carry out biomedical research work.



- CG5: Possession of technical ability to obtain precise and reproducible results which can be used to draw valid and objective conclusions in the field of biomedicine.
- CG6: Possession of critical ability, both when reading scientific biomedical literature and when interpreting the results of experiments.
- CG7: Ability to orally communicate biomedical research matters or data in a fluent way, in both Spanish and English, taking into account the audience for which the presentation is intended.
- CG8: Ability to write correct, precise and well-structured texts about different types of biomedical research work.
- CG9: Ability to work in a team with allocated tasks and participate in work meetings, contributing to the solution of biomedical problems and achievement of working group objectives.

Specific competences

• CE2: Knowledge of the tools and techniques for oral and written expression which are appropriate to the scientific language of biomedicine, in order to be able to apply them throughout the duration of the Master's Degree.

PROGRAMA

The course covers all the following points:

- research design and the writing process
- how to write a good title
- being accurate and arresting
- how to write an abstract
- choosing the appropriate structure
- covering all the main points
- how to write an introduction
- general-specific patterns of writing
- Swales' "creating a research space" model
- how to write a methods section
- use of passive and active structures
- maintaining an appropriate flow of information
- describing methods
- how to write a results section
- appropriate design of figures and tables
- appropriate use of figures and tables
- reporting data
- how to write a discussion section
- coherence, cohesion and linking words
- comparing and contrasting data
- presence of the author
- strength of claim and hedging
- citation and use of sources
- the publication process
- following instructions to authors
- writing covering letters
- replying to reviewers



ACTIVIDADES FORMATIVAS

1. Class work: (18 hours)

a) Lecturer Input: (12 hours)

Participants will be expected to understand and be able to apply to their own specific contexts the topics as outlined in the Course Content section.

This will involve knowledge objectives 1-4 and skills / competences 1-5.

b) Student Activities: (6 hours)

Participants will be expected to complete in class a series of content-related activities which allow them to show their practical understanding of the content provided. Individual, pair and group work will be used.

This will involve knowledge objectives 1-4 and skills / competences 1-5.

- 2. Work outside of class: (17 hours)
- a) Completion of in-class activities: (6 hours)

Based on input from a previous class session, participants will be expected to complete exercises and mini-projects for the following class session.

b) Individual writing exercises: (11 hours)

This will consist of writing or completing texts based on material provided by the teacher.

3.Exam (2 hours)

On the last day, students will complete a written examination which includes exercises focused on specific problems in scientific writing, and composing a text based on material provided by the teacher. This text must follow (to the degree that this is possible) the format of a specific part/parts of the full research article (e.g. abstract, introduction, or results), and adhere to the norms of scientific English writing.

EVALUACIÓN

CONVOCATORIA ORDINARIA

This course will be assessed on attendance/participation (20%) and on the quality of the written exercises. Grades for this will be given based on the student's ability to implement the key issues covered in the course including

- Appropriate style
- Cohesion and coherence
- Flow of information
- Clarity and concision

The work for Dr Carmona accounts for 30% of the total grade, and the exam for Dr Breeze accounts for 50% of the total grade.

CONVOCATORIA EXTRAORDINARIA



Any student who fails to obtain 50% overall will have to take a special examination in June. The examination will consist of exercises on English grammar and scientific style, and a practical writing task.

HORARIOS DE ATENCIÓN

Dra Ruth Breeze (rbreeze@unav.es)

- Despacho 1110 Edificio ICS Planta 1
- Horario de tutoria: Concertar cita por mail

BIBLIOGRAFÍA

Swales, J. and Feak, C. 2012. Academic writing for graduate students. Ann Arbor: University of Michigan Press.

Swales, J. and Feak, C. 2000. English in today's research world. Ann Arbor: University of Michigan Press.