Course guide
250960 - HABCOM-I - Communication Skills I

Last modified: 22/05/2025

Unit in charge: Barcelona School of Civil Engineering
Teaching unit: 751 - DECA - Department of Civil and Environmental Engineering.

Degree: MASTER'S DEGREE IN NUMERICAL METHODS IN ENGINEERING (Syllabus 2012). (Compulsory subject). ERASMUS MUNDUS MASTER'S DEGREE IN COMPUTATIONAL MECHANICS (Syllabus 2013). (Optional subject).

Academic year: 2025 **ECTS Credits:** 5.0 **Languages:** English

LECTURER

Coordinating lecturer: SERGIO ZLOTNIK MARTINEZ

Others: ALBERTO GARCIA GONZALEZ, SERGIO ZLOTNIK MARTINEZ

TEACHING METHODOLOGY

The course consists of 4 hours per week of activities.

Support material in the form of a detailed teaching plan is provided using the virtual campus ATENEA: content, program of learning and assessment activities conducted and literature.

Although most of the sessions will be given in the language indicated, sessions supported by other occasional guest experts may be held in other languages.

LEARNING OBJECTIVES OF THE SUBJECT

This module is aimed to help the students identify the important aspects for the preparation of oral presentations, improving their communication skills in the scientific field. It also aims to improve their knowledge of foreign languages.

* To learn the necessary methodology for oral presentations. Identify the key aspects of the presentation of research works. * Perform a rational use of computational techniques for the preparation and presentation of scientific works. * Be able to adapt the work to a deadline, summarizing and organizing complex ideas to clarify them upon their presentation to an audience, improving their understanding.

* Oral communication: research presentations, attendance to
conferences and presentation of articles.
* Interactiveness: Moderation of talks, job interviews

The aim of the module is to help students identify important aspects in preparing scientific papers and articles to improve their own writing skills. * Learn the methodology to perform the structuring of scientific texts. * Identify the key aspects of the preparation of papers and research articles. * Rational use of computational techniques for the preparation and presentation of scientific papers. * Ability to adapt the work to a deadline, summarizing and organizing complex ideas to lighten the face of the ability to understand the audience. * Written communication: Reports, Thesis, articles in journals and conferences.

STUDY LOAD

Type	Hours	Percentage
Hours large group	45,0	36.00
Self study	80,0	64.00

Total learning time: 125 h

CONTENTS

Course introduction

Description:
Presentation of the course, main concepts and assessment mechanisms

Specific objectives:
Provide an overview of the course and the assessment mechanisms

Full-or-part-time: 25h 02m
Theory classes: 5h 06m
Practical classes: 1h 58m
Laboratory classes: 1h 58m
Self study : 16h

Introduction to LaTeX

Description:
Introduction to LaTeX

Specific objectives:
Provide skills to use LaTeX text processor

Full-or-part-time: 25h 02m
Theory classes: 5h 06m
Practical classes: 1h 58m
Laboratory classes: 1h 58m
Self study : 16h

Scientific writing

Description:
Best practices for scientific writing

Specific objectives:
Provide with skills for scientific writing

Full-or-part-time: 25h 02m
Theory classes: 5h 06m
Practical classes: 1h 58m
Laboratory classes: 1h 58m
Self study : 16h

Communication tools

Description:
Describe the basic concepts and tools in communication
Students write a short bio-sketch and present themselves in one minute

Specific objectives:
Create a common language and set the main goals for communication
Know each other, assess the level of maturity in communication

Full-or-part-time: 25h 02m
Theory classes: 5h 06m
Practical classes: 1h 58m
Laboratory classes: 1h 58m
Self study : 16h

Scientific and Technical Presentations

Description:
Best practices for oral presentations
Presentation activities

Specific objectives:
Provide with skills in oral communication
Practice and reinforce acquired knowledge

Full-or-part-time: 25h 02m
Theory classes: 5h 06m
Practical classes: 1h 58m
Laboratory classes: 1h 58m
Self study : 16h

GRADING SYSTEM

The mark of the course is obtained from the ratings of continuous assessment.

Continuous assessment consist in several activities, both individually and in group, of additive and training characteristics, carried out during the year (both in and out of the classroom).

The teachings of the laboratory grade is the average in such activities.

EXAMINATION RULES.

Failure to perform a laboratory or continuous assessment activity in the scheduled period will result in a mark of zero in that activity.

BIBLIOGRAPHY

Basic:
- Higham, N.J. Handbook of writing for the mathematical sciences. 2nd ed. Philadelphia: SIAM, 1998. ISBN 9780898714203.
- Tufte, Edward R.. The Visual Display of Quantitative Information. Cheshire, Connecticut: Graphics Press, 1983. ISBN 096139210X.
- Alley, Michael. The Craft of Scientific Presentations [on line]. New York: Springer, 2013 [Consultation: 18/07/2024]. Available on: https://link-springer-com.recursos.biblioteca.upc.edu/book/10.1007/978-1-4419-8279-7. ISBN 9781441982797.
- Alley, Michael. The Craft of Scientific Writing [on line]. 4th ed. New York: Springer, 2018 [Consultation: 18/07/2024]. Available on: https://ebookcentral-proquest-com.recursos.biblioteca.upc.edu/lib/upcatalunya-ebooks/detail.action?pq-origsite=primo&docID=5327233. ISBN 991001685609706711.