

# Communication Skills I (250960)

## General Information

|                    |  |
|--------------------|--|
| <b>School</b>      | ETSECCPB   |
| <b>Departments</b> | Departament d'Enginyeria Civil i Ambiental (DECA)  |
| <b>Credits</b>     | 5.0 ECTS   |
| <b>Programs</b>    | MÀSTER UNIVERSITARI EN MÈTODES NUMÈRICS EN ENGINYERIA (pla 2012)<br>MÀSTER UNIVERSITARI EN MÈTODES NUMÈRICS EN ENGINYERIA (pla 2012) |
| <b>Course</b>      | 2025/26  |

## Main teaching language at each group

- Group 10Q1 English (Q1)

## Faculty

Responsible Faculty: Sergio Zlotnik Martinez  
Faculty: Sergio Zlotnik Martinez

## Objectives of Education

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.

## Total hours of student work

|                     |                    | Hours  | Percentage |
|---------------------|--------------------|--------|------------|
| Supervised Learning | Large group        | 45.0 h | 100.00 %   |
|                     | Medium group       | 0.0 h  | 0.00 %     |
|                     | Laboratory classes | 0.0 h  | 0.00 %     |
|                     | Guided Activities  | 0.0 h  | 0.00 %     |
| Self Study          |                    | 80.0 h |            |

## Contents

### Course introduction

Presentation of the course, main concepts and assessment mechanisms

#### Specific Objectives

Provide an overview of the course and the assessment mechanisms

### Introduction to LaTeX

Introduction to LaTeX

#### Specific Objectives

Provide skills to use LaTeX text processor

### Scientific writing

Best practices for scientific writing

#### Specific Objectives

Provide with skills for scientific writing

### Communication tools

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

### Scientific and Technical Presentations

Best practices for oral presentations  
Presentation activities

#### Specific Objectives

Provide with skills in oral communication  
Practice and reinforce acquired knowledge

## Activities

## **Title + Abstract writing**

Prepare the title and abstract of one topic

### **Dedication**

1h

## **Poster design and presentation**

Prepare one poster and present it to your classmates

### **Dedication**

2h

## **Proposal preparation**

Prepare a proposal presentation for a scientific call.

### **Dedication**

4h

## **Oral presentation**

Prepare slides and speech to explain one topic to your classmates

### **Dedication**

2h

## **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.

## **Grading Rules**

*(\*) The evaluation calendar and grading rules will be approved before the start of the course.*

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.

## **Test Rules**

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

## **Office Hours**

Upon request

## 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](#). New York: Springer, 2013. ISBN 9781441982797.
- Alley, Michael. [The Craft of Scientific Writing](#). 4th ed. New York: Springer, 2018. ISBN 991001685609706711.

