

## Course guide

### 250960 - HABCOM-I - Communication Skills 1

**Last modified:** 28/03/2024

<b>Unit in charge:</b>	Barcelona School of Civil Engineering	
<b>Teaching unit:</b>	751 - DECA - Department of Civil and Environmental Engineering.	
<b>Degree:</b>	MASTER'S DEGREE IN NUMERICAL METHODS IN ENGINEERING (Syllabus 2012). (Compulsory subject). ERASMUS MUNDUS MASTER'S DEGREE IN COMPUTATIONAL MECHANICS (Syllabus 2013). (Optional subject).	
<b>Academic year:</b> 2023	<b>ECTS Credits:</b> 5.0	<b>Languages:</b> English

#### LECTURER

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<b>Coordinating lecturer:</b>	SERGIO ZLOTNIK MARTINEZ
<b>Others:</b>	ALBERTO GARCIA GONZALEZ, SERGIO ZLOTNIK MARTINEZ

#### TEACHING METHODOLOGY

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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

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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	25,5	20.38
Self study	80,0	63.95
Hours medium group	9,8	7.83
Hours small group	9,8	7.83

**Total learning time:** 125.1 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:** 4h 48m

Theory classes: 2h

Self study : 2h 48m

### Introduction to LaTeX

**Description:**

Introduction to LaTeX

**Specific objectives:**

Provide skills to use LaTeX text processor

**Full-or-part-time:** 2h 24m

Theory classes: 1h

Self study : 1h 24m

### Scientific writing

**Description:**

Best practices for scientific writing

**Specific objectives:**

Provide with skills for scientific writing

**Full-or-part-time:** 19h 12m

Theory classes: 8h

Self study : 11h 12m



### 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:** 33h 36m

Theory classes: 6h

Laboratory classes: 8h

Self study : 19h 36m

### 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:** 48h

Theory classes: 6h

Laboratory classes: 14h

Self study : 28h

## 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.
- Michael Alley. The Craft of Scientific Writing and The Craft of Scientific Presentations.
- Tufte, Edward R.. The Visual Display of Quantitative Information. Cheshire, Connecticut: Graphics Press, 1983. ISBN 9780961392109.