Course guide
250960 - HABCOM-I - Communication Skills 1

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: 2022  ECTS Credits: 5.0  Languages: English

LECTURER

Coordinating lecturer: PEDRO DIEZ MEJIA

Others: PEDRO DIEZ MEJIA, SERGIO ZLOTNIK MARTINEZ

DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

Specific:
8382. Experience in numerical simulations. Acquisition of fluency in modern numerical simulation tools and their application to multidisciplinary problems engineering and applied sciences.
8383. Interpretation of numerical models. Understanding the applicability and limitations of the various computational techniques.
8384. Experience in programming calculation methods. Ability to acquire training in the development and use of existing computational programs as well as pre and post-processors, knowledge of programming languages ??and of standard calculation libraries.

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

<table>
<thead>
<tr>
<th>Type</th>
<th>Hours</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guided activities</td>
<td>5,0</td>
<td>4.00</td>
</tr>
<tr>
<td>Hours small group</td>
<td>20,0</td>
<td>16.00</td>
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<tr>
<td>Hours large group</td>
<td>20,0</td>
<td>16.00</td>
</tr>
<tr>
<td>Self study</td>
<td>80,0</td>
<td>64.00</td>
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</tbody>
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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: 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: 16h 48m
Theory classes: 7h
Self study: 9h 48m

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: 28h 47m
Theory classes: 4h
Laboratory classes: 8h
Self study: 16h 47m

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: 43h 12m
Theory classes: 6h
Laboratory classes: 12h
Self study: 25h 12m
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: