

Modelling workshop

Code: 100099
ECTS Credits: 9

Degree	Type	Year	Semester
2500149 Mathematics	FB	2	2

Contact

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Teaching groups languages

You can check it through this [link](#). To consult the language you will need to enter the CODE of the subject. Please note that this information is provisional until 30 November 2023.

Teachers

Maria Rosa Camps Camprubi

Julià Cufi Sobregrau

Natalia Castellana Vila

Judit Chamorro Servent

Prerequisites

(See the official version in catalan)

Objectives and Contextualisation

(See the official version in catalan)

Competences

- Apply critical spirit and thoroughness to validate or reject both one's own arguments and those of others.
- Develop critical thinking and reasoning and know how to communicate it effectively, both in one's own languages and in a third language.
- Effectively use bibliographies and electronic resources to obtain information.
- Generate innovative and competitive proposals for research and professional activities.
- Recognise the presence of Mathematics in other disciplines.

- Students must be capable of communicating information, ideas, problems and solutions to both specialised and non-specialised audiences.
- Take account of social, economic and environmental impacts when operating within one's own area of knowledge.
- When faced with real situations of a medium level of complexity, request and analyse relevant data and information, propose and validate models using the adequate mathematical tools in order to draw final conclusions
- Work in teams.

Learning Outcomes

1. Analyse a situation and identify points for improvement.
2. Apply critical spirit and thoroughness to validate or reject both one's own arguments and those of others.
3. Contrast the solution obtained, after resolving the model, in terms of its adaptation to the real phenomenon.
4. Develop the capacity to identify and mathematically describe a problem, structure the available information and select an adequate model.
5. Effectively use bibliographies and electronic resources to obtain information.
6. Identify situations that require changes or improvements.
7. Identify the social, economic and environmental implications of academic and professional activities in the area of your knowledge.
8. Propose new experience-based methods or alternative solutions.
9. Propose viable projects and action which can promote social, economic and environmental benefits. Propose way of evaluating projects and actions to improve sustainability.
10. Students must be capable of communicating information, ideas, problems and solutions to both specialised and non-specialised audiences.
11. Work in teams

Content

(See the official version in catalan)

Methodology

(See the official version in catalan)

Annotation: Within the schedule set by the centre or degree programme, 15 minutes of one class will be reserved for students to evaluate their lecturers and their courses or modules through questionnaires.

Activities

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Lectures	15	0.6	
Type: Supervised			

Team working seminars	60	2.4
Type: Autonomous		
Personal work	148	5.92

Assessment

(See the official version in catalan)

Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Oral presentations	25%	2	0.08	1, 2, 3, 4, 7, 6, 8, 9, 10, 11, 5
Written memoir and a possible exam on the team project	45%	0	0	1, 2, 3, 4, 7, 6, 8, 9, 10, 11, 5
Written memoir on the individual project and other possible individual submissions	30%	0	0	1, 2, 3, 4, 7, 6, 8, 9, 10, 11, 5

Bibliography

(See the official version in catalan)

Software

No specific software is used in the course