29805 - Mathematics III

1.General information

1.1.Aims of the course

1.2.Context and importance of this course in the degree

1.3.Recommendations to take this course

2.Learning goals

2.1.Competences

2.2.Learning goals

2.3.Importance of learning goals

3.Assessment (1st and 2nd call)

3.1.Assessment tasks (description of tasks, marking system and assessment criteria)

4.Methodology, learning tasks, syllabus and resources

4.1.Methodological overview

The methodology of the course is based on:

- Lectures.
- Problem solving.
- Computer lab sessions using mathematical software.

4.2.Learning tasks

29805 - Mathematics III

In order that students get the learning outcome, the following learning activities are offered:
1. Lectures and problem solving
One of the main resources in order a student gets the corresponding learning outcome are lectures mixed
with problem solving.
2. **Computer lab sessions**
Students spend parts of their time doing a wide range of computer lab work in small groups.
3**. Tutorial**

4. Final exams

CAMPUS DE TERUEL
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1. Lectures and problem solving
One of the main resources in order a student gets the corresponding learning outcome are lectures mixed
with problem solving.
2. Computer lab sessions
Students spend parts of their time doing a wide range of computer lab work in small groups.
3. Problem solving for each topic in the program
Students, divided into small groups, will solve a set of problems for each topic in the program. Feedback
on assessment will be provided.
4. Continual assessments (written exams)
5. Tutorial
6. Final exams

4.3.Syllabus
- Differential equations of first order.
- Linear differential equations.
- Numerical mehtods for intial value problems and boundary value problems.
- Power and Fourier series.
- Laplace's equation.
- The wave equation.
- The heat equation.
- Finite difference method for intial value problems and boundary value problems.

4.4.Course planning and calendar

Schedule of classes is stablished by EINA and EUP de Teruel, and it will be published before starting the academic year.
Each Professor will provide a schedule for tutorial.
Other activities will be scheduled according to the number of students and will be announced in advance
(http://add.unizar.es).

4.5.Bibliography and recommended resources