

Información del Plan Docente

Academic Year	2017/18
Faculty / School	110 - Escuela de Ingeniería y Arquitectura
Degree	470 - Bachelor's Degree in Architecture Studies
ECTS	6.0
Year	1
Semester	First semester
Subject Type	Basic Education
Module	---

1.General information**1.1.Introduction****1.2.Recommendations to take this course****1.3.Context and importance of this course in the degree****1.4.Activities and key dates****2.Learning goals****2.1.Learning goals****2.2.Importance of learning goals****3.Aims of the course and competences****3.1.Aims of the course****3.2.Competences****4.Assessment (1st and 2nd call)****4.1.Assessment tasks (description of tasks, marking system and assessment criteria)****5.Methodology, learning tasks, syllabus and resources****5.1.Methodological overview**

Most of central ideas and topics are given by lectures to the whole group of students. They break up into small groups of 15 to 20 students for problem classes and computer classes. The problem classes allow students to work out hand-outs under the close assistance and guideline of the teacher. In addition, there are computer sessions every two weeks which allow to emphasize numerical aspects of the subject.

For the proper monitoring of the subject the student must perform an ongoing study since the first day of class. To support the student will have the assistance of Professor, both in the classroom and in the tutorial sessions.

5.2.Learning tasks

Lectures, computer classes, problem classes, group work, personal work, tutorials, evaluation.

5.3.Syllabus

Algebra

- Algebraique structures.
- Linear spaces. Properties.
- Linear applications. Matricial representation.
- Diagonalization. Applications.

Affine and euclidean geometry

- Geometrical applications of linear Algebra. Basic concepts on affine geometry and its most important elements.
- Metric geometry. The golden proportion.

Calculus. Functions of one variable

- Real functions of real variable. Limits and continuity.
- Derivability. Applications.
- Aproximation.
- Integration. Geometrical applications.
- Numerical methods.

5.4.Course planning and calendar

Schedules and classrooms for lectures, problem classes and computer classes may be found at <http://eina.unizar.es>

30701 - Mathematics 1

Scheduling of examinations is agreed by the School Board and are available at <http://eina.unizar.es> Deadlines for intermediate examination and submission of group work will be announced in advance.

5.5. Bibliography and recommended resources

- Bibliography

David C. Lay, "Álgebra lineal y sus aplicaciones"

Pearson Addison Wesley (3ª Ed.), 2007.

Gilbert Strang, "Álgebra lineal y sus aplicaciones"

International Thomson, (4ª Ed.), 2007.

Salas, Hille y Etgen, "Calculus. Una y varias variables"

Reverté, (4ª Ed.), 2002