

28608 - Descriptive geometry

Syllabus Information

Academic Year: 2020/21

Subject: 28608 - Descriptive geometry

Faculty / School: 175 - Escuela Universitaria Politécnica de La Almunia

Degree: 422 - Bachelor's Degree in Building Engineering

ECTS: 6.0

Year: 1

Semester: Second semester

Subject Type: Basic Education

Module: ---

1.General information

1.1.Aims of the course

Know the design and modeling techniques to represent the space in an appropriate and concrete way.
To carry out the different existing tools to understand the bodies and the geometry that posture them.
Have visual and spatial capacity.
Represent the results appropriately

1.2.Context and importance of this course in the degree

It is a subject placed in the second semester of the studies (which would be equivalent to the second year of a degree).
It is mandatory.
It has a teaching load of 6 ECTS

1.3.Recommendations to take this course

Without prerequisites

2.Learning goals

2.1.Competences

G01 G02 G03 G04 G05 G06 G07 G08 G09 G10 G11 G12 G13 G14 G15 G16 G17 G18 G19 G20 G21 G22
CB3
CE1

2.2.Learning goals

Ability to apply representation systems: dihedral and bounded system.
Know the fundamentals of the geometry of the applied space.
Ability to interpret and develop solutions in a three-dimensional space.
Ability to model 3D design

2.3.Importance of learning goals

The knowledge acquired in an abstract way in the world of geometric representation, will be applied in the design of buildings and infrastructure.

3.Assessment (1st and 2nd call)

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

Evaluation by course

Evaluation tests 70%

Exercises and practices of 3D 30%

Final evaluation

100% Evaluation Test

4.Methodology, learning tasks, syllabus and resources

4.1.Methodological overview

The methodology followed in this course is oriented towards the achievement of the learning objectives. A wide range of teaching and learning tasks are implemented, such as theory sessions, workshops, computer practice, autonomous work and study, and tutorials.

If classroom teaching were not possible due to health reasons, it would be carried out on-line

4.2.Learning tasks

This course is organized as follows:

- **Theory sessions.**
- **Classroom practices / seminars / workshops.** In an always graphic and visual way, the geometry problems will be announced, applied to a real function.
- **Computer sessions.** The development of the practices will be autonomous, with the assistance of the teaching staff to accompany the understanding of the contents.
- **Autonomous workshop-type work.**
- **Tutorials.** Group and individual (face-to-face or online).

4.3.Syllabus

This course will address the following topics:

1. Dihedral system
 1. Covers
 2. Dimensions
2. Dimensioned system
 1. Point, straight, flat
 2. Intersections
 3. Parallelism and perpendicularity
 4. Distances
 5. Plane changes
 6. Abatures
 7. Figures
3. 3D CAD

4.4.Course planning and calendar

Topic 1. 4 weeks

Topic 2. 8 weeks

Topic 3. 3 weeks

Further information concerning the timetable, classroom, office hours, assessment dates and other details regarding this course will be provided on the first day of class or please refer to the Faculty of EUPLA website and Moodle.

4.5.Bibliography and recommended resources

http://biblos.unizar.es/br/br_citas.php?codigo=28608&year=2020

