

**Información del Plan Docente**

<b>Academic Year</b>	2017/18
<b>Faculty / School</b>	100 - Facultad de Ciencias
<b>Degree</b>	453 - Degree in Mathematics
<b>ECTS</b>	6.0
<b>Year</b>	4
<b>Semester</b>	Second semester
<b>Subject Type</b>	Optional
<b>Module</b>	---

**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**

- Lectures in which the theoretical aspects of the subject are presented.
- Solution and oral or written presentation of theoretical and practical issues of the subject.
- Problems proposed for personal work.
- Sessions in which the students solve the proposed exercises and problems and discuss their solution procedures.

**5.2.Learning tasks**

- Lectures for explanation of theoretical contents.

## **27038 - Celestial Mechanics**

- Practical sessions with oral discussion of proposed problems whose solution the students should previously have handed in.
- Support for learning through documents and links on the page of the subject at ADD, [moodle.unizar.es](http://moodle.unizar.es) (restricted access, with the PIN and password provided by the University)

### **5.3.Syllabus**

- Motion in a central force field.
- Analytical dynamics: Lagrangian and Hamiltonian formulation.
- Orbital perturbations.

### **5.4.Course planning and calendar**

### **5.5.Bibliography and recommended resources**