

ASTRONOMY:

Modern and Observational Astronomy

Goals:

- Provide students with an introduction to astronomy from a modern perspective.
- Basic concepts for the current understanding of the Cosmos from the beginning of astronomy to the present understanding of the Universe will be described.
- Finally, basic concepts of observational astronomy will be taught and practical experiences in the field will be carried out.

Lectures

Field visits or laboratory work

Total of contact hours: 15

Contents:

Module I: Introduction to Astronomy

- Astronomy in ancient times
- Modern astronomy: from Galileo to 21st century
- Radio astronomy and Infrared astronomy
- Modern observatories

Module II: Celestial Bodies

- The Solar System
- The stars, types and evolution
- Star clusters
- Nebulae and interstellar medium
- The Milky Way
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Module III: The Universe at Large Scale

- Galaxies
- Active galaxies
- Galaxy clusters
- Big Bang Theory

Module VI: Field observations

- Lectures
- Design workshop
- Field visits or laboratory work

Bibliography and study material:

The student will be provided with a text with the content of the course thematic units. Also, the student will have the possibility of using the University's available means and infrastructure (library, use of internet, etc.).