



Science in History

Code: 42279 ECTS Credits: 15

Degree	Туре	Year	Semester
4313223 History of Science: Science, History and Society	ОВ	0	1

Contact

Name: Xavier Roqué Rodríguez

Email: Xavier.Roque@uab.cat

Teachers

Annette Mulberger

Jorge Molero Mesa

Carlos Tabernero Holgado

José Pardo Tomás

Jon Arrizabalaga Valbuena

José Romo Feito

Oliver Hochadel

Maria Emilia Calvo

Carlos Dorce

Use of languages

Principal working language: spanish (spa)

Prerequisites

This is a compulsory module and it does not depend on other modules.

Objectives and Contextualisation

To understand and characterize the major stages of the history of science, and the different views on the nature and social relations of science through history

To communicate orally and in writing historical arguments

To interpret, comment upon and edit scientific texts of the past and to be able to place them in their historical contex

Content

1. Introduction: Science and History

Part 1. Science in Antiquity

- 2. The birth of science?
- 3. Astronomy and cosmology

- 4. Mathematics and Geometry
- 5. The natural philosophy of Aristotle
- 6. Medicine and the Life Sciences

Part 2. Medieval Science

- 7. The establishment of a scientific corpus
- 8. The golden age of Arabic science
- 9. New institutions and translations
- 10. The transmission of knowledge
- 11. Medicine, Science in the Middle Ages and the Renaissance
- 12. The medieval cosmos

Part 3. The Scientific Revolution

- 13. The Copernican Revolution
- 14. Galileo and movement; Harvey and blood circulation
- 15. The reform of knowledge: Bacon and Descartes
- 16. Newton: The world system

Part 4. The Enlightenment

- 17. Actors and spaces of natural philosophy
- 18. The Encyclopedia and the crisis of the Enlightenment
- 19. The Chemical Revolution

Part 5. The rise of science

- 20. Evolution and laboratory medicine
- 21. The human sciences
- 22. The sciences of matter and energy

Part 6. contemporary Science

- 23. Little science, big science
- 24. The molecular view of life
- 25. Science and power in the Cold War

Oral presentations and synthesis

First session of presentations

Second session of presentations

Session summary and conclusions