

The Origins of Modern Science

Code: 42284
ECTS Credits: 15

Degree	Type	Year	Semester
4313223 History of Science: Science, History and Society	OT	0	2

Contact

Name: Xavier Roqué Rodríguez
Email: Xavier.Roque@uab.cat

Use of languages

Principal working language: catalan (cat)

Teachers

José Romo Feito
Miquel Forcada
Josep Casulleras
Montserrat Díaz

Prerequisites

Those of the master in general.

Objectives and Contextualisation

The overall objective is to identify the elements that characterize multicultural premodern science, as well as those

Content

Presentation

Location: UB Faculty of Philology

Block 1a. Medieval and Arabic Science: Natural and Medical Sciences

Location: UB Faculty of Philology, Mondays 15-18 h

1. The acculturation of the classical scientific legacy
2. The acculturation of the classical scientific legacy: the natural and medical sciences
3. The development of medical manuals
4. The case of al-Andalus: the beginnings of the scientific tradition (ss. IX-XI)
5. Al-Andalus: the natural and medical sciences s.XI
6. Al-Andalus: medical sciences, natural and following the ss.XII
7. Influence of Islamic medicine and the natural sciences in Europe
8. An overview of medicine and the natural sciences in the Islamic world

Block 1b. Medieval and Arabic Science: Astronomy and astrology mathematics

Location: UB Faculty of Philology, Fridays 15-18 h

1. Astronomy, Astrology and Islam
2. The astronomers' activity: practical problems and theoretical research
3. Construction and use of the astrolabe, a medieval computer
4. Applied astronomy: geography and geodesy, orientation, time keeping,

5. The three fundamental practices of the horoscope: aspects, houses and progressions

6. Authors, methods and attributions in astrology
7. The astrolabe in astrology
8. The other tools of the astrologer: tables and calculations

Block 2 Aspects of Scientific Revolution

Location: Faculty of UB, Mondays 16-19 h; Fridays 16-18 h

1. The astronomical revolution: Copernicus to Galileo (I)
2. The astronomical revolution: Copernicus to Galileo (II)
3. The new science of motion
4. The mechanical philosophy (I)
5. The mechanical philosophy (II)
6. The mechanical philosophy (III)

7. The Newtonian synthesis (I)

8. The Newtonian synthesis (II)
9. The Newtonian synthesis (III)
10. The Scientific Revolution in the historiography