

From the Ancient to the Modern World through Islam: Humans and Nature

Code: 45757

Credits: 5

2026/2027

Degree programme	Type	Course
History of Science: History, Heritage and Scientific Communication	OP	1

Contact lecturer

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Teaching staff (external to UAB)

Miquel Forcada

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Group languages

You can consult this information at the [end](#) of the document.

Prerequisites

There are none.

Objectives

Offers a wide perspective of classical medicine and natural sciences, their acculturation in Islamic societies and the influence of these societies in the modern period. It does so through different geographies, spaces, objects and actors, and through the analysis of transversal issues such as gender, religion or colonialism.

Learning outcomes

- CA21 (Critically evaluate the processes of transmission and transformation of medicine and natural sciences in the Arab-Islamic civilisation and their contributions to European scientific development.) Critically evaluate the processes of transmission and transformation of medicine and natural sciences in the Arab-Islamic civilisation and their contributions to European scientific development.
- CA22 (Explain to specialised and non-specialised audiences the multicultural elements of science from the classical tradition and medieval Islamic societies to the modern era.) Explain to specialised and non-specialised audiences the multicultural elements of science from the classical tradition and medieval Islamic societies to the modern era.
- CA23 (Explain to specialised and non-specialised audiences the dimensions of gender, race, class,

materiality, and power of medicine and the natural sciences from the classical tradition and medieval Islamic societies to the modern era.) Explain to specialised and non-specialised audiences the dimensions of gender, race, class, materiality, and power of medicine and the natural sciences from the classical tradition and medieval Islamic societies to the modern era.

- KA20 (Describe the foundations of the history of medical and natural sciences (from the classical tradition and medieval Islamic societies to the modern era), as well as the biographical profile of great scientists and natural philosophers of the past.) Describe the foundations of the history of medical and natural sciences (from the classical tradition and medieval Islamic societies to the modern era), as well as the biographical profile of great scientists and natural philosophers of the past.
- KA21 (Critically and with historiographical rigor the pertinent information on medicine and natural sciences from the classical tradition and medieval Islamic societies to the modern era.) Critically and with historiographical rigor the pertinent information on medicine and natural sciences from the classical tradition and medieval Islamic societies to the modern era.
- KA22 (Describe the secondary literature on the development of natural philosophy, science, and technology from the classical tradition and medieval Islamic societies to the modern era.) Describe the secondary literature on the development of natural philosophy, science, and technology from the classical tradition and medieval Islamic societies to the modern era.
- KA23 (Rigorously define the dimensions of gender, race, class, materiality and power of medicine and natural sciences from the classical tradition and medieval Islamic societies to the modern era.) Rigorously define the dimensions of gender, race, class, materiality and power of medicine and natural sciences from the classical tradition and medieval Islamic societies to the modern era.
- SA20 (Organise information regarding the origins of modern science, compiling it, classifying it and presenting it in a clear and coherent way.) Organise information regarding the origins of modern science, compiling it, classifying it and presenting it in a clear and coherent way.
- SA21 (Identify what doctors and naturalists of the classical and medieval traditions knew, thought and acted, as well as the institutions in which they developed their activity and their influence in the modern era, incorporating the dimensions of gender, race, class, materiality and power.) Identify what doctors and naturalists of the classical and medieval traditions knew, thought and acted, as well as the institutions in which they developed their activity and their influence in the modern era, incorporating the dimensions of gender, race, class, materiality and power.

Contents

1. The acculturation of the classical legacy in Islamic societies: Abbasid Baghdad and Umayyad Cordoba.
2. The rethinking of medicine: conceptions of medicine and the development of major manuals (from Hunayn ibn Ishāq to Avicenna).
3. The birth of the Arab alchemical tradition: Jābir ibn Ḥayyān, al-Rāzī, and their influence.
4. Nature: animals and plants among writers, physicians, and philosophers.
5. The contributions of al-Andalus to medicine, botany, and agronomy.
6. Muslims and Christians in the 12th century: philosophers and translators.
7. The influence of Islamic scientific culture in Europe.
8. From alchemy to chemistry: experimental philosophy.
9. Medicine and pharmacy in the modern era.
10. Colonial nature.

Learning activities and methodology

Title	Hours	ECTS	Learning outcomes

Autonomous work	75	3	CA21, CA22, CA23, KA20, KA21, KA22, KA23, SA20, SA21
Exercises	20	0.8	CA21, CA22, CA23, KA20, KA21, KA22, KA23, SA20, SA21
Classes and seminars	30	1.2	CA21, CA22, CA23, KA20, KA21, KA22, KA23, SA20, SA21

The course covers the medieval period and up to the emergence of modern science. The teaching methodology combines lectures with student participation through discussion of the proposed readings and the resolution of exercises and practical cases.

Annotation: within the schedule set by the centre or degree programme, 15 minutes of one class will be reserved for students to evaluate their lecturers and their courses or modules through questionnaires.

Assessment

Continuous assessment activities

Title	Weight	Hours	ECTS	Learning outcomes
Attendance and participation	20%	0	0	CA21, CA22, CA23, KA20, KA21, KA22, KA23, SA20, SA21
Essay 2	40%	0	0	CA21, CA22, CA23, KA20, KA21, KA22, KA23, SA20, SA21
Essay 1	40%	0	0	CA21, CA22, CA23, KA20, KA21, KA22, KA23, SA20, SA21

The assessment includes both the attendance and participation of the students and the completion of written exercises. These will be two essays of about 1,200 words each related to the contents of the subject and following the guidelines indicated by the teachers. One essay oriented to the medieval time period and the other to the 15th-17th centuries.

The following will be taken into account for the evaluation of the subject:

- Attendance and active participation in the completion of exercises and in the classroom discussion of the proposed readings; weight: 20%.
- 1 essay on medieval science; weight: 40%.
- 1 essay on Renaissance and modern science; weight: 40%.

This subject allows the use of AI technologies exclusively for support tasks such as bibliographic or content-based searches, text correction or translations, always under teachers approval. The student must clearly (i) identify which parts have been generated using AI technology; (ii) specify the tools used; and (iii) include a critical reflection on how these have influenced the process and final outcome of the activity. Lack of transparency regarding the use of AI in the assessed activity will be considered academic dishonesty; the corresponding grade may be lowered, or the work may even be awarded a zero. In cases of greater infringement, more serious action may be taken.

Bibliography

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Software

Not required.

Course groups and languages

The information provided is provisional until November 30. After this date, you will be able to consult the language of each group through this [link](#). To access the information, you will need to enter the course CODE

Type of teaching	Group	Language	Semester	Shift
(TEm) Theory (master)	1	Catalan	second semester	afternoon