VNIVERSITAT DE VALÈNCIA

Course Guide
46475 Introduction to the History of Science

COURSE DATA

DATA SUBJECT

Code: 46475
Name: Introduction to the History of Science
Cycle: Master's Degree / Doctorate
ECTS Credits: 6
Academic year: 2025-26

STUDY (S)

Degree	Center	Acad. year	Period
2252 - Master's Degree in History of Science and Scientific Communication	Facultat de Medicina i Odontologia	1	First quarter
3129 - PhD Social and Hist. Studies on Science, Med.	Escola de Doctorat		First quarter
3129 - PhD Social and Hist. Studies on Science, Med.	Escola de Doctorat		First quarter

SUBJECT-MATTER

Degree	Subject-matter	Character
2252 - Master's Degree in History of Science and Scientific Communication	Introducción a la historia de la ciencia	COMPULSORY
3129 - PhD Social and Hist. Studies on Science, Med.		
3129 - PhD Social and Hist. Studies on Science, Med.		

COORDINATION

FERRAGUD DOMINGO CARMEL

SUAY MATALLANA IGNACIO

SUMMARY

This module aims to offer a general introduction to the history of science, technology and medicine, following a chronological and thematic structure, avoiding any encyclopedic pretensions and minimizing gender and Eurocentric biases, as well as the hegemony of views focused on experts or elites. The critical perspective against commonly accepted images is encouraged, as well as their interrelationships and connections with the various societies and cultures. The aim is also to put into action the conceptual framework and mental tools acquired through practical exercises carried out by students.

Because it is an interuniversity master's degree, complete information can be found on the master's website, at the following address: http://www.historia-ciencia-comunicacion.org

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PREVIOUS KNOWLEDGE

RELATIONSHIP TO OTHER SUBJECTS OF THE SAME DEGREE

There are no specified enrollment restrictions with other subjects of the curriculum.

OTHER REQUIREMENTS

COMPETENCES / LEARNING OUTCOMES

2252 - Master's Degree in History of Science and Scientific Communication

Analizar e interpretar textos clásicos de la medicina y de la ciencia.

Aplicar métodos de análisis crítico para estudiar fuentes textuales, iconográficas y materiales relacionadas con la medicina, la ciencia y la tecnología.

Comprender las relaciones entre la ciencia, la medicina y la tecnología con las sociedades y las culturas en las que se desarrollan a lo largo de los diversos períodos históricos.

Conocer el desarrollo general de la historia de la ciencia, la medicina y la tecnología en su contexto social y cultural a lo largo del tiempo.

Conocer las biografías de los principales protagonistas del desarrollo de la historia de la ciencia, la medicina y la tecnología.

Conocer las biografías de protagonistas de la ciencia, la medicina y la tecnología en determinados momentos históricos y contextos sociales y culturales.

Conocer y analizar críticamente los procesos de circulación de saberes y prácticas científicas, así como sus principales protagonistas, escenarios, medios, mecanismos y consecuencias.

Conocer y analizar críticamente los procesos de divulgación de la ciencia considerando sus diversos protagonistas, contextos, medios, prácticas, finalidades y resultados.

Conocer y utilizar con destreza las principales fuentes de información relacionadas con la comunicación científica, así como otras herramientas de recuperación de información (principales repertorios bibliográficos y bases de datos).

Diferenciar las principales tendencias en los estudios sobre ciencia, medicina y género.

Discutir y valorar las perspectivas, los debates historiográficos y los métodos de trabajo de las principales líneas de investigación histórica en torno a la ciencia, de la tecnología y de la medicina.

Identificar las principales fuentes de información relacionadas con la historia de la ciencia, la medicina y la tecnología así como las herramientas de recuperación de esta información (principales repertorios

bibliográficos y bases de datos).

Identificar los principales espacios en los que se desarrolla la actividad científica, tecnológica y médica (laboratorios, aulas, academias, observatorios, entornos naturales, museos, hospitales, fábricas, etc.).

Identificar los principales períodos y contextos geográficos del desarrollo histórico de la ciencia, la medicina y la tecnología.

Identificar los principales rasgos de la cultura material de la ciencia, la medicina y la tecnología.

Identificar y analizar críticamente textos clásicos de la medicina y de la ciencia en sus diversas modalidades.

Students should demonstrate self-directed learning skills for continued academic growth.

Students should possess and understand foundational knowledge that enables original thinking and research in the field.

DESCRIPTION OF CONTENTS

0.

1. The debate about the origins. Science, technology and medicine in the Ancient world. The critique of Eurocentrism. Studies on the history of science, medicine and technology in the great Eastern civilizations and in Classical Greece.

2. Medieval science, technology and medicine. Classical heritage. Science in Arabic. Latin translations and vernacularization. The universities Manuscript culture. Late medieval science. Continuities and ruptures.

3. The Scientific Revolution (16th-17th centuries). Concept, criticism and questioning. Spaces of knowledge in the Modern Era. The transatlantic world and science.

4. Science, technology and medicine during the 18th century. Science in the public sphere.

5. Science, technology and medicine in the 19th century. Science as a liberal profession. Science and gender.

6. The technosciences of the 20th century. Big Science. Science and war. Biomedicine, pharmaceutical industry and public health in the 20th century.

WORKLOAD

PRESENCIAL ACTIVITIES

Activity	Hours
Theoretical and practical classes	60,00

Total hours	**60,00**

NON PRESENCIAL ACTIVITIES

Activity	Hours
Attendance at other activities	0,00
Individual or group project	0,00
Independent study and work	0,00
Preparation of lessons	0,00
Preparation for assessment activities	0,00
Resolution of case studies	0,00
Total hours	**0,00**

TEACHING METHODOLOGY

Lessons. The aim is to transmit knowledge and activate cognitive processes in the student, involving their participation. Each unit of the program will begin with an hour-long theoretical presentation by the teaching staff in charge.

Cooperative learning. The aim is to develop active learning through cooperative work strategies between students and encourage shared responsibility to achieve group goals. Students will work collectively in a weekly online forum. With the participation of the teaching staff, a discussion will proceed and some final conclusions will be reached.

Individual work. Each student must do individual work based on the materials proposed by the teacher.

EVALUATION

- **Writing of a portfolio**. It will be submited conveniently filled out with the mandatory and voluntary activities that will be discussed during classes with the instructions of the teaching staff and the bibliography recommended in each case **[up to 70%]**.
- **Participation in forums and face-to-face sessions [up to 30%]**. This activity will not be recoverable in the extraordinary assessment tests.
- **Voluntary activities**. These are the complementary works linked to conferences and seminars organized during the course by the López Piñero Institute and other similar centers and are recommended by the teaching staff. Other issues will also be taken into account, such as social media dissemination work and all the voluntary exercises that the teaching staff may suggest throughout the course **[they can increase up to 15%]**.

Note: All papers submitted for evaluation must be original and follow the instructions given by the teachers regarding the structure, content, extension and sources of information used.

The usual procedures will be used to confirm the identity of the student and their authorship, applying, where appropriate, the corresponding regulations on plagiarism.

https://www.uv.es/plagio/pginas_web.html

https://sga.ua.es/es/normativa-academica/eees/evaluacion-de-los-aprendizajes/evaluacion-de-los-aprendizajes.html

https://estudios.umh.es/presentacion/normativas/evaluacion-y-progreso-y-permanencia-del-estudiantado-en-la-umh/

REFERENCES

- Bowler, Peter J.; Morus, Iwan Rhys. Panorama general de la ciencia moderna. Barcelona: Crítica, 2007. Duffin, Jacalyn. History of Medicine: A Scandalously Short Introduction, Third Edition. Toronto-Buffalo-London, 2021 (trad. cast. Madrid: Melusina, 2018). Fara, Patricia. Science: A Four Thousand Year History. Edición: 1. OUP: Oxford, 2010 (trad. cast. Barcelona: Ariel, 2012). Lloyd, Geoffrey; Sivin, Nathan. The Way and the Word: Science and Medicine in Early China and Greece. New Haven, CT: Yale University Press, 2002. López Piñero, José María. Breve historia de la medicina. Madrid: Alianza, 2000. Morus, Iwan Rhys, ed. The Oxford Illustrated History of Science. Oxford Illustrated History. Oxford, New York: Oxford University Press, 2017. Pestre, Dominique; Krige, John. Companion to Science in the twentieth century. London-New York: Routledge, 2003. Pestre, Dominique; Roqué, Xavier. Ciència, diners i política: assaig d'interpretació. Santa Coloma de Queralt, Obrador edáendum-Universitat Rovira i Virgili, 2008. Poskett, James. Horizons: A Global History of Science. Penguin Books: Dublin, 2022. (trad. cast. en Madrid: Crítica, 2022).

- El manual principal daquesta assignatura és Sabers en acció, una obra col·lectiva que pot consultar-se en castellà o català, i de forma lliure i gratuïta, a la pàgina: https://sabersenaccio.iec.cat/