

**COURSE DATA****Data Subject**

Code	46477
Name	Ciencia, medicina, tecnología y sociedad
Cycle	Master's degree
ECTS Credits	6.0
Academic year	2023 - 2024

Study (s)

Degree	Center	Acad. year	Period
2252 - M.U. en Historia de la Ciencia y Comunicación Científica	Faculty of Medicine and Odontology	1	First term

Subject-matter

Degree	Subject-matter	Character
2252 - M.U. en Historia de la Ciencia y Comunicación Científica	4 - Ciencia, medicina, tecnología y sociedad	Obligatory

Coordination

Name	Department
SUAY MATALLANA, IGNACIO	225 - History of Science and Documentation

SUMMARY

The course is organized in six sessions. Each session consists of a general introduction by the professor, followed by a discussion of the main points, as well as a discussion of various issues raised by the teacher in the electronic forums. Capital aspects of the social nature of science, medicine and technology are dealt with, such as the commercialization of science (usually analyzed through examples linked to the pharmaceutical industry); the changing definitions of what science is (usually based on discussions about pseudosciences) and, finally, a session dedicated to a topic of special relevance in the months prior to the module (genetically modified foods, climate change, eugenics).

As 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>

Prof Resp: Enrique Perdiguero Gil (quique@umh.es)



PREVIOUS KNOWLEDGE

Relationship to other subjects of the same degree

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

Other requirements

OUTCOMES

2252 - M.U. en Historia de la Ciencia y Comunicación Científica

- Students should apply acquired knowledge to solve problems in unfamiliar contexts within their field of study, including multidisciplinary scenarios.
- Students should be able to integrate knowledge and address the complexity of making informed judgments based on incomplete or limited information, including reflections on the social and ethical responsibilities associated with the application of their knowledge and judgments.
- Students should communicate conclusions and underlying knowledge clearly and unambiguously to both specialized and non-specialized audiences.
- Students should demonstrate self-directed learning skills for continued academic growth.
- Describir los procesos de producción y consumo del conocimiento científico, así como los mecanismos de comunicación social de la ciencia, con sus diversos medios, espacios y protagonistas.
- Analizar e interpretar textos clásicos de la medicina y de la ciencia.
- Conocer las diversas formas de popularización de la ciencia.
- Conocer las características generales de la terminología médica y científica a través del estudio de su historia y su papel en la comunicación científica actual.
- 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).
- Aplicar métodos de análisis crítico para estudiar fuentes textuales, iconográficas y materiales relacionadas con la medicina, la ciencia y la tecnología.
- 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.
- 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.).



- Conocer las biografías de protagonistas de la ciencia, la medicina y la tecnología en determinados momentos históricos y contextos sociales y culturales.
- Diferenciar las principales tendencias en los estudios sobre ciencia, medicina y género.
- Conocer las principales tendencias en filosofía y sociología de la ciencia, así como en los estudios de ciencia, tecnología y sociedad.

LEARNING OUTCOMES

The subject offers an introduction to the Studies on Science, Medicine, Technology and Society, necessary both for historical-scientific research and for the communication of science. It examines the main issues addressed in social studies on science, technology and medicine. Expose the guidelines and the most relevant results of the philosophy and sociology of science.

Prof Resp: Enrique Perdiguero Gil (quique@umh.es)

WORKLOAD

ACTIVITY	Hours	% To be attended
Theoretical and practical classes	60,00	100
TOTAL	60,00	

TEACHING METHODOLOGY

Cooperative learning: Develop active learning through cooperative work strategies between students and fostering shared responsibility to achieve group goals.

Case study: Acquisition of learning through the analysis of real or simulated cases, in order to interpret and solve them, training various alternative solution procedures.

Lecture/Lecture: Transmit knowledge and activate cognitive processes in the student, involving their participation.

Practical works: Reexamine, and put into practice previous knowledge by different readings and works.

EVALUATION

The students will be evaluated according to their participation in the classes, in the debates in the forums, comments in the blogs and with the activity notebook prepared throughout the course (text comments, reflections, written reports, etc.), always according to the instructions of the teachers. This evaluation will be substantiated in: - Delivery of the portfolio properly filled in with the activities that take place during the class or those that the teacher orders [70%]. - Written assignments and participation in debate seminars (forums) open during the week and the conference cycles of the program [30%]. This activity will not be recoverable in the extraordinary evaluation tests.



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

Basic

- Hackett, Edward J. "The handbook of science and technology studies". Cambridge (Massachusetts) ; London The Mit Press cop. 2008.
- Sismondo, Sergio. "An introduction to science and technology studies. Malden (Massachusetts) [etc.] Blackwell Publishing 2005.
- Bucchi, Massimiano 1970-. Belton, Adrian trad. "Science in society an introduction to social studies of science". London Routledge 2004.

Additional

- Pestre, Dominique / Krige, John. "Companion to Science in the twentieth century". London ; New York Routledge cop. 2003.
- Yearley, Steven. "Making sense of science [electronic resource] : understanding the social study of science /". London : SAGE, 2005.
- Chalmers, A. F. "¿Qué es esa cosa llamada ciencia? una valoración de la naturaleza y el estatuto de la ciencia y sus métodos". Madrid Siglo XXI de España 1984-1993.
- Collins, H. M. (Harry M.), 1943-. Pinch, T. J. (Trevor J.). "The Golem at large [electronic resource] : what you should know about technology /". Cambridge : Cambridge University Press, 2002, c1998.
- Schiebinger, Londa L. "Has feminism changed science?". Cambridge (Mass.) Harvard University Press 2001.
- Cooter, Roger / Pickstone, John V. "Companion to medicine in the twentieth century". London ; New York Routledge Taylor and Francis Group 2003.
- García Dauder, Silvia. Perez Sedeño, Eulalia. "Las "mentiras" científicas sobre mujeres /". Madrid Catarata 2018.