UAB
Universitat Autònoma de Barcelona

History of Technoscience

Code: 106242
ECTS Credits: 6

2025/2026

Degree	Type	Year
Science, Technology and Humanities	OB	3

Contact

Name: Cristina Sans Ponseti

Email: cristina.sans.ponseti@uab.cat

Teachers

Richard Antczak

Teaching groups languages

You can view this information at the end of this document.

Prerequisites

This subject is related to other courses in the degree such as: Social History of Knowledge (Course 4, 1st semester); Scientific Communication (2nd semester, 3rd year); Management and Evaluation of Science (Course 14, 3rd to 5th semester). Proficiency in the English language is recommended for reading comprehension. Fortunately, however, the majority of readings can be done in Spanish.

Objectives and Contextualisation

This subject analyzes the changing and flexible boundaries between science and technology in the contemporary era, from the French Revolution to the multipolar and global world of the 21st century.

"Technoscience" is presented as an open concept that can be applied to different examples and historical periods, helping us identify the deep relationships between theoretical knowledge, practical skills and materials, and their social, cultural, and political dimensions.

In the studied period, we can observe the transition from a classical model of knowledge (in a broad sense of the term), one of "pure" science, relatively "autonomous," hierarchical, focused on the academic world, to a new knowledge inevitably linked to the industrial/business world, more uncertain and dependent on the opinions of the global public sphere.

Competences

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- Construct discourse on scientific and technical knowledge using the linguistic resources of argument.
- Develop and evaluate interdisciplinary projects that combine scientific, technological and humanistic knowledge and encourage citizens' involvement in matters related to science and technology in society.
- Make critical use of digital tools and interpret specific documentary sources.
- Recognise the political, social and cultural dimension of science and technology development in the different historical periods.
- Students must be capable of communicating information, ideas, problems and solutions to both specialised and non-specialised audiences.

Learning Outcomes

1. Assess the reliability of sources, select important data and cross-check information.
2. Develop a critical awareness of how scientific knowledge circulates and of its dynamic status between experts and non-experts.
3. Explain the role of transmission and analysis of scientific knowledge in a democratic society.
4. Formulate scientific museography projects.
5. Identify and critically analyse the relationships between power, productive system and technological development.
6. Take part in collective practices of cultural comprehension of advances in science and technology.

Content

1. Introduction: Regimes of knowledge and techno-science. Theoretical perspectives.
2. Nineteenth-century industrial science: steam, electricity, and chemistry.
3. Urban modernity: public health, transportation, museums.
4. Instruments of the Empire: revisiting colonial technoscience.
5. Technoscience and World Wars.
6. Technoscience and the Cold War.
7. Technoscience and globalization.

Activities and Methodology

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Discussion in the classromm	16	0.64	2, 5, 6, 1
Lecture	33	1.32	3, 5, 1
Type: Supervised			
Tutorials and essay supervision	5	0.2	2, 3, 5, 6, 4, 1
Type: Autonomous			
Individual study	87	3.48	2, 3, 5, 6, 4, 1

The course combines theoretical lectures with in-class debates.

It is divided into two blocks:

Block A includes the general historiographic framework of the course and a chronological approach to 19th-century technoscience: from the French Revolution to the turn of the century in 1900.
Block B studies the role of technoscience in the 20th century: from the World Wars to the Cold War and the turn of the century in 2000.

The bibliography and working materials for each topic will be published on the virtual campus.

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

Continous Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Partial Exam Block A	30%	1.5	0.06	2, 3, 5, 6, 4, 1
Partial Exam Block B	30%	1.5	0.06	2, 3, 5, 6, 4, 1
Written essay Block A	20%	3	0.12	2, 3, 5, 6, 4, 1
Written essay Block B	20%	3	0.12	2, 3, 5, 6, 4, 1

The evaluation will consist of:

A) Two partial exams (30% + 30%), one for each block of the course. The format will be announced well in advance.

B) Two written exercises (20% + 20%), one for each block of the course. The format will be announced well in advance.

In case the exams cannot be conducted in person, their format will be adapted (while maintaining their weighting) to the possibilities offered by the UAB's virtual tools. Assignments, activities, and class participation will be carried out through forums, wikis, and/or exercise discussions via Teams, etc.

The professor will ensure that students can access them or offer alternative means within their reach. All evaluation activities will have their corresponding review, either in person or virtually. At the time of each evaluative activity, the professor will inform the students (Moodle) of the procedure and date for reviewing the grades.

To pass the course, a minimum average of 5 is required. Students will receive a "Not evaluable" grade if they have not submitted more than 30% of the evaluation activities. If a student engages in any irregular behavior that could significantly affect the grade of an evaluation activity.

Recovery:
In order to participate in the recovery, students must have been previously assessed in a set of activities that

account for at least 2/3 of the total grade. The minimum average grade for the evaluated activities cannot be lower than 3 nor higher than 5.
The recovery will consist of resubmitting the suspended assessment tasks in a format that will be announced with sufficient advance notice.

One-off assessment. The student who has taken up the One-off Assessment mode will do a final test that will consist of an exam in the classrrom (60%) and will hand out a written essay (40%).

This subject allows the use of AItechnologies exclusively for support tasks such as [bibliographic or content-based searches, text correction or translations, where applicable]. Other specific situations may be contemplated, as deemed appropriate by the teacher. 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

Specific software is not required.

Groups and Languages

Please note that this information is provisional until 30 November 2025. You can check it through this link. To consult the language you will need to enter the CODE of the subject.

Name	Group	Language	Semester	Turn
(PAUL) Classroom practices	1	Catalan	first semester	morning-mixed
(TE) Theory	1	Catalan	first semester	morning-mixed