

Degree	Type	Year
Biology	OT	4

Contact

Name: Carlos Taberero Holgado

Email: carlos.taberero@uab.cat

Teaching groups languages

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

Prerequisites

None.

Objectives and Contextualisation

History of Biology is taken in the 4th year of the Degree of Biology and is part of the group of optional subjects.

The main objectives are:

Introduce the student to the consideration and experimentation of history as a vehicle for reflection and cultural construction, as an instrument of research, documentation and popularization, and as a pedagogical tool in the field of science. Within the specific scope of the history of biology, give the student the necessary tools to identify and critically analyze the main historiographical currents related to the natural sciences.

Introduce the student to the knowledge of the processes of generation, circulation, communication and management of scientific knowledge (particularly in the natural sciences), as well as his impact on socio-cultural transformations throughout history.

Introduce the student to the analysis of the role and the situation of the natural sciences and their social relations today and throughout history. Consider the social, cultural, strategic and economic importance of life sciences in society. And thus, give the student the necessary tools to synthesize, from the historical consideration of the natural sciences, a perspective of the current and future reach of these sciences.

Competences

- Act with ethical responsibility and respect for fundamental rights and duties, diversity and democratic values.
- Be able to analyse and synthesise
- Be able to organise and plan.
- Develop a historical vision of biology.
- Develop a sensibility towards environmental issues.

- Make changes to methods and processes in the area of knowledge in order to provide innovative responses to society's needs and demands.
- Students must be capable of applying their knowledge to their work or vocation in a professional way and they should have building arguments and problem resolution skills within their area of study.
- Students must be capable of collecting and interpreting relevant data (usually within their area of study) in order to make statements that reflect social, scientific or ethical relevant issues.
- Students must be capable of communicating information, ideas, problems and solutions to both specialised and non-specialised audiences.
- Students must develop the necessary learning skills to undertake further training with a high degree of autonomy.
- Students must have and understand knowledge of an area of study built on the basis of general secondary education, and while it relies on some advanced textbooks it also includes some aspects coming from the forefront of its field of study.
- Take account of social, economic and environmental impacts when operating within one's own area of knowledge.
- Take sex- or gender-based inequalities into consideration when operating within one's own area of knowledge.
- Work in teams.

Learning Outcomes

1. Analyse a situation and identify its points for improvement.
2. Analyse and describe, in general terms, the role and position of biology and its presence in society, now and across history.
3. Analyse the sex- or gender-based inequalities and the gender biases present in one's own area of knowledge.
4. Be able to analyse and synthesise.
5. Be able to organise and plan.
6. Critically analyse the principles, values and procedures that govern the exercise of the profession.
7. Develop a sensibility towards environmental issues.
8. Explain, from a social and historical standpoint, the different perspectives on the nature of biology.
9. Identify and characterise the major phases in the history of biology.
10. Identify and critically analyse the principal historiographic currents in biology.
11. Propose new methods or well-founded alternative solutions.
12. Propose projects and actions that incorporate the gender perspective.
13. Propose viable projects and actions to boost social, economic and environmental benefits.
14. Students must be capable of applying their knowledge to their work or vocation in a professional way and they should have building arguments and problem resolution skills within their area of study.
15. Students must be capable of collecting and interpreting relevant data (usually within their area of study) in order to make statements that reflect social, scientific or ethical relevant issues.
16. Students must be capable of communicating information, ideas, problems and solutions to both specialised and non-specialised audiences.
17. Students must develop the necessary learning skills to undertake further training with a high degree of autonomy.
18. Students must have and understand knowledge of an area of study built on the basis of general secondary education, and while it relies on some advanced textbooks it also includes some aspects coming from the forefront of its field of study.
19. Work in teams.

Content

Distributive blocks

1. Science, history, history of science

2. Ways of looking
3. East / West
4. Universe, printing, anatomy
5. Narratives about nature
6. The two cultures
7. Specialization and institutionalization
8. The historical vision of life
9. The death of nature
10. Individual, society, information
11. Chaos, order and dinosaurs
12. Conclusions and perspectives

Activities and Methodology

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Theoretical classes / discussion sessions with ICT support	45	1.8	6, 2, 3, 8, 10, 9, 17, 16, 14, 15, 7
Type: Supervised			
Solving problems and tasks autonomously, participation in discussions	7.5	0.3	6, 2, 3, 1, 8, 10, 9, 11, 12, 13, 18, 17, 16, 14, 15, 7, 4, 5
Type: Autonomous			
Independent study, consultation of bibliography and realization of works	90	3.6	6, 2, 3, 1, 8, 10, 9, 11, 12, 13, 18, 17, 16, 14, 15, 7, 4, 5, 19

The subject is based on a theoretical-practical methodology through discussion sessions on bibliographic materials that are provided during the semester.

Note: 15 minutes of a class will be reserved, within the timetable established by the centre/title, for the complementation by the students of the assessment surveys of the teaching staff's performance and the assessment of the subject.

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
-------	-----------	-------	------	-------------------

Final essay	40%	3.5	0.14	6, 2, 3, 1, 8, 10, 9, 11, 12, 13, 18, 17, 16, 14, 15, 7, 4, 5, 19
Short essay 1	30%	2	0.08	6, 2, 3, 1, 8, 10, 9, 11, 12, 13, 18, 17, 16, 14, 15, 7, 4, 5
Short essay 2	30%	2	0.08	6, 2, 3, 1, 8, 10, 9, 11, 12, 13, 18, 17, 16, 14, 15, 7, 4, 5

The course evaluation is continued in relation to:

Active participation in class discussions, which will include two short essays to be assigned during the semester (30% of the final grade each written essay).

A final and brief essay preparation (40% of final grade) about some concrete topic of the course's themes and competences, in which the students have to evidence their capacity of historically locating and critically analyzing any issue related with the history of biology.

To the effectiveness of evaluation, the students have to approve each one of the proves separately.

The student who has not approve the course could present a recuperation prove. To that the student should be previously evaluated minimums to the three quarters of the total evaluation of the course. Additionally, the student must obtain, at least, 3.5 in the total evaluation of the course.

On carrying out each evaluation activity, lecturers will inform students (on Moodle) of the procedures to be followed for reviewing all grades awarded, and the date on which such a review will take place.

Students will obtain a "Not assessed/Not submitted" course grade unless they have submitted more than 30% of the assessment items.

In the event of a student committing any irregularity that may lead to a significant variation in the grade awarded to an assessment activity, the student will be given a zero for this activity, regardless of any disciplinary process that may take place. In the event of several irregularities in assessment activities of the same subject, the student will be given a zero as the final grade for this subject.

Single evaluation:

If necessary, a single assessment test will be carried out for those students who, for justified reasons, cannot take the continuous assessment tests of the subject (essays and participation in class debates). This test will consist of the preparation, in person, at a date, time and classroom to be determined, of a brief final written essay (in this case 100% of the mark) in relation to a specific topic integrated into the contents and competences of the subject, and in which the student must demonstrate his/her ability to historically situate and critically analyze any problem related to the history of biology. The teaching staff will assist students who require a single assessment with a specific tutorial related to each of the main blocks.

The students who take advantage of the single evaluation and who do not take the indicated test will be considered as "Not evaluated", exhausting the rights to enroll in the subject.

Bibliography

Bibliographic sources of digital access will be provided during the semester. However, below are reference works that may also be used.

Basic initial bibliography

Alexander, Denis R.; Numbers, Ronald L. (eds.) *Biology and ideology from Descartes to Dawkins*. Chicago: University of Chicago Press; 2010.

Barona, Josep Lluís. *Història del pensament biològic*. València: Universitat de València; 2003.

Brunton, Deborah (eds). *Medicine transformed: health, disease and society in Europe, 1800-1930*. Manchester: Manchester University Press in association with the Open University; 2004.

Giordan, André (eds.) *Conceptos de Biología* (vols. 1&2). Madrid: Labor; 1988.

Jahn, Ilse, Löther, Rolf; Senglaub, Konrad. *Historia de la biología: teorías, métodos, instituciones y biografías breves*. Barcelona: Labor; 1990.

Jardine, N.; Secord, J.A.; Spary E.C. (eds). *Cultures of natural history*. Cambridge: Cambridge University Press; 1996.

Additional bibliography will be offered throughout the semester. The initial bibliography may undergo some modifications depending on the restrictions on attendance imposed by the health authorities. In this case, we will use various platforms such as <https://mirades.uab.cat/ebs/>.

Software

In addition to web and Office tools, such as the campus online, email, Google docs, word, powerpoint and excel, tools such as wetransfer, dropbox or the VLC audiovisual file reader will be used.

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
(TE) Theory	14	Spanish	first semester	morning-mixed