

25521 - Philosophy of science

Syllabus Information

Academic year: 2024/25

Subject: 25521 - Philosophy of science

Faculty / School: 103 - Facultad de Filosofía y Letras

Degree: 269 - Degree in Philosophy
587 - Degree in Philosophy

ECTS: 6.0

Year: 3

Semester: First semester

Subject type: Compulsory

Module:

1. General information

The subject of Philosophy of science is part of the group of subjects that belong to the area Logic and philosophy of science . Its contents and learning activities have been designed in such a way that they serve as a complement to the concepts and methodologies of the subjects of the area, which within our curriculum are the ones that have a more analytical nature. The student will acquire knowledge of issues related to scientific explanation, confirmation, demarcation, and scientific progress and change.

These approaches and objectives are aligned with the following Sustainable Development Goals (SDGs) of the United Nations Agenda 2030 (<https://www.un.org/sustainabledevelopment/es/>), in such a way that the acquisition of the learning results of the subject provides training and competence to contribute to some extent to their achievement: Goal 4: Quality Education; Goal 5: Gender Equality; Goal 10: Reducing Inequalities; Goal 11: Sustainable Cities and Communities; Goal 12: Responsible Production and Consumption; Goal 13: Climate Action; Goal 16: Peace, Justice and Strong Institutions

2. Learning results

The student, at the end of this subject, will be able to deal with arguments of scientific traditions and evaluate their different virtues; they will know how to study their theoretical components, sometimes presented differently according to the different methodological traditions learned, and their inferential structure. They will know the basic notions of philosophy of science and the aspects of epistemology and ontology related to science. They will learn about some of the major milestones in the history of science and the philosophy of science. They will be able to deepen in the development of research methods and philosophical analysis and will know how to evaluate the importance of scientific work and its methods for philosophical practice.

3. Syllabus

1. First perspectives
2. The Scientific Revolution
3. The Darwinian Revolution
4. Empiricism and logic
5. Probability and scientific method
6. Falsacionism
7. Observation
8. The history of science and the scientific method
9. The semanticist perspective
10. The forms of scientific realism

4. Academic activities

Face-to-face classes will have a duration of two hours. In them, the teacher will explain the most important concepts and theses. Students should complement the explanations with the readings recommended in the bibliography. In the classes the concepts and theories of the syllabus will be covered. Students are encouraged to ask their doubts to the teacher during tutoring hours.

5. Assessment system

Final global test. Written exam on the theoretical material offered (100% of the grade). The acquisition of knowledge, the ability to present and argue, and the ability to apply knowledge to diverse issues and problems are evaluated

6. Sustainable Development Goals

11 - Sustainable Cities and Communities
12 - Responsible Production and Consumption
13 - Climate Action