

Academic Year: (2024 / 2025)

Review date: 22-04-2024

Department assigned to the subject: Humanities: Philosophy, Language, Literature Theory Department

Coordinating teacher: ALMAZAN GOMEZ, MANUEL ADRIAN

Type: Compulsory ECTS Credits : 6.0

Year : 1 Semester : 2

REQUIREMENTS (SUBJECTS THAT ARE ASSUMED TO BE KNOWN)

Familiarity with reading and ability to comprehend essays. Critical ability

SKILLS AND LEARNING OUTCOMES

LEARNING OUTCOMES:

- Identify, analyze and critically evaluate ethical and social problems and arguments relevant to the development of scientific activity.
- Communicate effectively, in writing and orally, the result of the analysis of the ethical and social dimensions of science and its applications.
- Know the Sustainable Development Goals (SDG) and the concept of sustainability.
- Originate and develop innovative knowledge on current problems of knowledge, science and technology from the different perspectives integrated in the Area of Logic and Philosophy of Science and related disciplines.
- Communicate scientific content to the general public using multiple formats (visual, oral, written).
- Work as a team, participate in discussion and debate forums contributing ideas and acknowledging the contributions of others.
- Prepare accessible documentation for non-experts in the field.
- Develop a historical view of Science from its birth, through the different evolutions that have occurred, until reaching the current situation.
- Evaluate and interpret the interdisciplinary scientific world in which we find ourselves today.
- Plan and execute all phases of a research project.
- Carry out the writing of a project or scientific study.
- Apply the scientific method and critically evaluate one's own scientific activity and that of others.

OBJECTIVES

The course aims, on the one hand, to offer an introduction to the most important notions and debates in the philosophy of science, as well as to its fundamental authors. On the other hand, its objective will be to approach scientific research from a social, political and economic perspective, making it one more social activity. Thus, this subject is oriented to offer a realistic image of scientific research and of the perplexities and problems posed by the scientific image of reality. The student will end up knowing basic notions of epistemology and the ideological, sociological and political foundations of the scientific exercise. Finally, past and present initiatives for the organization of the scientific community for social and self-reflexive/critical purposes will be presented.

DESCRIPTION OF CONTENTS: PROGRAMME

BLOCK 1: What is science? More questions than we think

UNIT 1: SCIENCE AND ITS METHOD

- Can we separate science and the non-scientific?
- Is there a single scientific method?
- Does science always seek the truth?

UNIT 2: SCIENCE AND ITS HISTORY

- How long has science existed?
- Is there a progress of science?
- Can we radically separate the history of science from the history of society?

BLOCK 2: Science as a social activity

UNIT 3: PRECONCEPTIONS OF MODERN SCIENCE (AND THEIR CRITICISMS)

- From nature as a mechanical object to Gaia
- From the neutrality of science to technoscience
- From androcentric science to feminist epistemology
- From Eurocentric science to Southern Epistemologies
- From scientist as capitalist worker to scientist as defender of the terrestrial multiverse

LEARNING ACTIVITIES AND METHODOLOGY

This is a course of a markedly theoretical nature, based on:

- Lectures by the professor, introducing the relevant issues.
- High level of student participation in the questions posed.
- Reading by the student of essays and articles in seminar format.
- Tutorials with the professor
- Debates
- Final oral exam

ASSESSMENT SYSTEM

% end-of-term-examination:	0
% of continuous assessment (assignments, laboratory, practicals...):	100

The evaluation will be based on:

- Three mid-term exams (20% each) with questions on the texts worked on in the seminar sessions (60%).
- Class presentations of the texts worked on (20%).
- A class debate (20%)

In order to pass the course it will be mandatory to achieve at least a 5 in all parts of the evaluation.

BASIC BIBLIOGRAPHY

- DIEZ, J.A. MOULINES, U. FUNDAMENTOS DE FILOSOFÍA DE LA CIENCIA, ARIEL, 1999
- Echeverría, J. INTRODUCCION A LA METODOLOGIA DE LA CIENCIA: LA FILOSOFIA DE LA CIENCIA EN EL SIGLO XX , Cátedra, 2003
- Feyerabend, P. La ciencia en una sociedad libre, Siglo XXI., 1982
- Grupo Oblomoff Un futuro sin porvenir, El salmón, 2014
- Harding, S. Ciencia y feminismo, Morata, 1996
- Hempel, C. Filosofía de la Ciencia Natural, Alianza, 2003

- Kuhn, T. La estructura de las revoluciones científicas, FCE, 2004
- Kuipers, T. (ed.) General Philosophy of Science: Focal Issues, Elsevier, 2007
- Latour, B. Dónde aterrizar, Taurus, 2019
- Merchant, C. La muerte de la naturaleza, Comares, 2020
- Merchant, C. Science and Nature. Past, Present, and Future, Routledge, 2018
- Popper, K. La lógica de la investigación científica, Tecnos, 1962
- SOLER, L. SANKEY H., HOYNINGEN-HUENEP. (eds) Rethinking Scientific Change and Theory Comparison, Springer, 2008
- Schamlzer, S.; Chard, D.; Botelho, A. Science for the people, University of Massachusetts Press, 2018