

Academic Year: (2023 / 2024)

Review date: 27-04-2023

Department assigned to the subject: Library and Information Sciences Department

Coordinating teacher: LASCURAIN SANCHEZ, MARIA LUISA

Type: Courses of humanities ECTS Credits : 3.0

Year : Semester :

REQUIREMENTS (SUBJECTS THAT ARE ASSUMED TO BE KNOWN)

Students do not need to have passed any specific subject.

OBJECTIVES

The course aims to promote the development of the following transversal and general skills:

- To know the multidimensional nature of research, and especially the interest and social involvement that scientific activity has in the integral development of a society.
- To know and analyse the role of the University in the promotion of the scientific knowledge necessary to strengthen the commitment of citizens to sustainability problems.
- To understand and apply the basic research tools in different fields of study.
- To know and use the Information and Communication Technologies necessary to express ideas, concepts and interact with different stakeholders.
- To know and develop respect and promotion of human rights, democratic awareness, basic mechanisms for citizen participation and an attitude towards environmental sustainability and responsible consumption.
- To know and apply the policies and practices of attention to especially disadvantaged social groups and to incorporate the principles of equality between men and women and of universal accessibility.
- To develop skills for collaborative work and participation in teams, to incorporate the values of cooperation, effort, respect and commitment.
- Analyse, reason critically, think creatively and evaluate one's own learning process by discussing one's own and other people's ideas assertively and in a structured way.

DESCRIPTION OF CONTENTS: PROGRAMME**THEME 1: From traditional science to open science**

The basic notions of scientific development are presented and the different existing research methods are analysed. The current context of open science and its basic pillars are analyzed, discussing the change of paradigm that it implies at the level of production, diffusion and appropriation of scientific knowledge. Open" concepts are presented (open-access, open data, open research, open innovation). The role of collaboration, transparency and reproducibility in scientific research is analyzed. The scope and limitations of participatory research (definition, characteristics, typologies) and the possibilities of including citizens in scientific research are discussed.

THEME 2: Science WITH and FOR society

This theme focuses on the analysis of the evolution of different lines of thought related to the transmission and production of knowledge between academia and society. European and national initiatives related to the promotion of interaction between science and society (dissemination, popularization, scientific culture, SWAFS calls, etc) are presented. Different calls for projects are identified in order to know their objectives, origins, background, foundations. Local and institutional initiatives are also presented that can include the participation of undergraduate students. The role of the scientist and the citizen in research projects is discussed and students are asked how to propose inclusive projects at different levels (such as the TFG).

THEME 3: Towards a sustainable society

One of the objectives of citizen science is to respond to local problems, many of them related to sustainability issues. Therefore, in this topic we will analyze the origin, background, scope and context in which the term Sustainable Development Goals (SDG) arises, also considering related concepts such as the Millennium Goals or Agenda 2030. Various international, national and local initiatives related to the fulfillment of the SDG will be presented. The social repercussion of the topic in the media, social networks, etc. will be analyzed and discussed.

THEME 4: The University's commitment to sustainability

Higher Education Institutions play a fundamental role in the development of new scientific knowledge and their action is central as a link between several stakeholders. For this reason, this theme focuses on the analysis of the actions carried out by universities in implementing initiatives related to sustainability. Emphasis will be placed on the Spanish context by considering strategies, regulations and policies proposed and implemented at the national level and in universities. The actions carried out at UC3M will be presented. Initiatives that include participatory methodologies will also be studied.

THEME 5: "Science in Action". The science-shops

This thematic section focuses on the study of the dynamics of a participatory project. It takes as an example actions carried out in a "science-shop" to analyze and value the processes, interaction between different stakeholders, participation, results, monitoring. Different real projects will be analysed and discussed. Finally, students will be proposed the implementation of participatory research projects focused on the resolution of problems related to sustainability.

LEARNING ACTIVITIES AND METHODOLOGY

The development of the course will include different methodologies:

The theoretical presentations will address historical and conceptual aspects related to the evolution of different topics such as open science, sustainability, scientific methodology, science-society relationship, etc. Diverse materials will be used such as power point presentations, videos, scientific dissemination material, web pages, etc.

A mixed format will be used (theoretical and practical presentations) in which both approaches will coexist. The practical part will be carried out through various actions: joint reading or viewing of material and subsequent debate, analysis of journalistic information or social networks, etc. On the other hand, techniques typical of group dynamics will be used to carry out ¿role play¿ actions (pretending to be different social actors). Workshop-type classes will also be developed implementing ¿focus groups¿ techniques, ¿brainstorming¿ etc.

A round table is expected to be held with the assistance of 2 to 4 guests who have experience in the field of sustainability and citizen science (scientists/policy makers/disseminators/technicians/managers). Their work will be presented and the students themselves will propose topics for debate or discussion. It may be proposed to open the session to a greater number of attendees.

Given that the realization of projects that can serve as a basis for TFG or future research projects will be promoted, the proposals will be discussed in groups and there will be a Committee of experts that can contribute ideas for the improvement of the project. This committee will be made up of members of the UC3M academic community (researchers, PAS, associations, etc.) related to sustainability actions.

Tutorials. Students will have 3 hours a week at their disposal to attend personalized tutorials. The tutorial schedules will be made public from the beginning of the course. Likewise, there will be continuous communication and follow-up with the coordination of the course from email.

ASSESSMENT SYSTEM

A continuous evaluation system will be followed, which will take into account both the student's participation in theory classes and in the realization of practical activities, where there will be an individual tutoring of the student. The realization of a project that allows to know the capacity of the student to integrate the knowledge acquired in the theoretical classes and in the practices will also be valued.

Percentage weight of the Final Exam: 0

Percentage weight of the rest of the evaluation: 100

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

BASIC BIBLIOGRAPHY

- Larrán, M.; Andrades, F.J. Implementing Sustainability and Social Responsibility Initiatives in the Higher Education System: Evidence from Spain. In Integrative Approaches to Sustainable Development at University Level, Springer: Cham, Switzerland, 2015

