uc3m Universidad Carlos III de Madrid

Methods in Sustainability Studies

Academic Year: (2023 / 2024) Review date: 06-06-2022

Department assigned to the subject: Social Sciences Department

Coordinating teacher: LAVEZZOLO PEREZ, SEBASTIAN

Type: Compulsory ECTS Credits: 6.0

Year: 1 Semester: 1

OBJECTIVES

- Capacity for methodological research in the social sciences and in the development of research designs.
- Capacity for descriptive and inferential statistical analysis, univariant and multivariant in the context of the information systems linked to the sustainable development goals.
- Capacity for identifying available information sources and creation of new relevant information for decision-making. Information availability according to several levels of social and geographic disaggregation.
- Ability to use databases at different levels of analysis for the descriptive study and evaluation of the statistical relationships between various indicators of sustainable development.
- Analysis of potential biases emerging from the process of building traditional information systems.
- Design of questionnaires and qualitative methods of information analysis: interviews, focus groups, experiments.

DESCRIPTION OF CONTENTS: PROGRAMME

- 1.Available information sources and creation of new relevant information for decision-making. Information availability according to several levels of social and geographic disaggregation.
- 2. Statistical analysis of surveys and censuses. Descriptive and inferential analysis.
- 3. Methodology for creating monitoring indicators since the information available on the public statistical services.
- 4. Principles of the creation of new information systems consistent with the pursuit of the SDGs.

LEARNING ACTIVITIES AND METHODOLOGY

- Theorical class: sessions in which the teacher develops the most important elements of each topic and presents the crucial conceptual problems linked to the skills that students should acquire. Although the role of the students in these sessions is more passive, there are several instances in which discussion is proposed.
- Theoretical-practical classes: sessions in which the teacher presents and discuss a paper linked to the topics of the session emphasizing the methodological choices, the empirical strategies and the relevance of the conclusions. The main goal of this strategy is to suggest to the students ways to analyse and critically read the recent literature on the topics of the course. In these sessions the role of the students is expected to be very active.
- Group work: session in which the teacher proposes a group activity to ground some of the concepts acquired and the use of information sources for statistical analysis.
- Individual work: during the course students will be asked to carry out an essay or a practical case analysis.
- Midterm and final exams.

ASSESSMENT SYSTEM

Class participation: 10% Group work: 20% Individual works: 10%

Final exam / Final paper: 60%

% end-of-term-examination: 60

% of continuous assessment (assigments, laboratory, practicals...): 40

- Bueno de Mesquita, Ethan and Anthony Fowler Thinking clearly with data: A guide to quantitative reasoning and analysis, Princeton University Press.
- Powner, Leanne C. Empirical research and writing: A political science student is practical guide, CQ Press, 2014