

## 26130 - Analysis of Social Data

### Syllabus Information

**Academic year:** 2023/24

**Subject:** 26130 - Analysis of Social Data

**Faculty / School:** 108 - Facultad de Ciencias Sociales y del Trabajo

**Degree:** 274 - Degree in Social Work

**ECTS:** 5.0

**Year:**

**Semester:** Second semester

**Subject type:** Optional

**Module:**

### 1. General information

This subject offers an introduction to statistical analysis of bivariate data and statistical inference, fundamental tools to train critical professionals. The students, after having taken the course "Statistics applied to Social Research ", know the basic techniques of descriptive statistics. It is, therefore, a continuation of the learning of statistical techniques. Likewise, the development of skills for the use of statistical software, essential nowadays to perform a statistical analysis of data, is considered fundamental.

These approaches and goals are aligned with the Sustainable Development Goals (SDGs) of the United Nations 2030 Agenda, as the use of real data helps to illustrate the status of certain SDGs, in particular SDG 5 (Gender Equality) and SDG 10 (Reducing Inequalities).

### 2. Learning results

- Is able to analyze and systematize the information provided by social research.
- Is able to interpret data on social needs and problems (knows and critically understands the main aspects of social imbalances and inequalities).
- Is able to assess and assess the collection of information and the reliability and importance of the information.
- Is able to assess and quantify the way in which social imbalances and inequalities (associated with poverty, unemployment, poor health,...) .
- Is capable of applying mechanisms for identification, analysis and measurement of social problems and needs.
- Is able to analyze and assess the impact of inequality and discrimination.
- Is able to identify social needs arising from health problems.
- Is capable of evaluating human situations and collecting, ordering, processing and analyzing information, taking into account research data.
- Is able to participate in the analysis of social policies.
- It is able to synthesize information.
- Is able to participate in the elaboration of research reports applied to social work and academic and professional work using different techniques, including those derived from information and communication technologies.

### 3. Syllabus

**Review topic:** descriptive study of a variable.

#### **Introduction to Inferential Statistics**

Introduction to Statistical Inference: elements of a statistical study, probability distributions, statistics and parameters.

Parameter estimation: confidence intervals.

Hypothesis testing: introduction and one-variable contrasts.

### **Study of the relationship between variables**

Two-dimensional statistics: statistical independence and double entry tables.

Study of the relationship between two qualitative variables: independence tests.

Study of the relationship between a quantitative variable and a qualitative variable: contrasts of means.

Study of the relationship between two quantitative variables: regression techniques.

## **4. Academic activities**

- **Master classes:** 20 hours.
- **Practical classes:** 30 hours.
- **Personal study:** 70 hours.
- **Assessment activities:** 5 hours

## **5. Assessment system**

The continuous assessment will consist of two written tests throughout the term (65% of the weight in the assessment) that will be developed, in part, using statistical software. In addition, the evaluation requires the presentation and exposition in class of a paper, which may be divided into several parts, in groups of up to three students (35% of the weight in the assessment). This work will be carried out with data from a file provided by the professor and with computer support, using for it a statistical software for data processing that the student considers that he/she knows enough to carry out the proposed work.

The single assessment will consist of a 65% written test and 35% of the presentation of the work previously mentioned , or you can also decide for the assessment of 100% of the written test. The written test will be developed in conditions analogous to those of the continuous assessment.

Both in continuous assessment and in single evaluation, in order to pass the course it will be necessary to obtain at least 3 points out of 10 in each of the written tests, in addition to an overall grade equal or higher than 5 points out of 10.