

Degree	Type	Year	Semester
2500257 Criminology	OB	2	1

## Contact

Name: Joel Martí Olivé  
Email: Joel.Marti@uab.cat

## Use of languages

Principal working language: catalan (cat)  
Some groups entirely in English: No  
Some groups entirely in Catalan: No  
Some groups entirely in Spanish: No

## Prerequisites

- No previous training in statistics is required. However, knowledge in mathematics will help students to effectively learn course content.
- The university offers a propaedeutic course (i.e., basics in mathematics and statistics) that students are strongly recommended to have taken in earlier coursework.

## Objectives and Contextualisation

**Quantitative Research Methods** is a course designed to introduce students to statistical data analysis as a tool for criminological research.

As one of its general objectives, the Degree in Criminology aims to train students in using criminological methods and techniques of analysis when studying data and situations of conflict, crime, and control in specific social contexts. To that end, the course objectives are:

- To learn basic statistical terms needed to perform descriptive and inferential data analysis with one or two variables;
- To apply those skills when conducting criminological research; and
- To use statistical software for quantitative data analysis.

**Quantitative Research Methods** is a continuation of the first-year courses **Scientific Research in Criminology** and **Criminological Data Sources**. By extension, knowledge in quantitative methods is taught in the second semester in the second-year course **Data Analysis**, focused on multivariate analysis.

## Content

### Tema 0. Course outline

0.1. Objectives and content

0.2. Activities and evaluation requirements

### PART I. DESCRIPTIVE DATA ANALYSIS

#### Unit 1. Univariate descriptive statistics

- 1.1. Introduction to statistical data analysis in Criminology
- 1.2. Software for statistical data analysis
- 1.3. Frequencies
- 1.4. Summary measures of one variable

## **Unit 2. Bivariate descriptive statistics**

- 2.1. Crosstabulations
- 2.2. Comparing means and variances: tables and graphs
- 2.3. Simple linear regression

## **PART II. BASIC OF INFERENCE STATISTICS**

### **Unit 3. Statistical sampling**

- 3.1. Population and sample. Types of sampling
- 3.2. Simple random sampling. Sample size and sampling error

### **Unit 4. Hypothesis testing**

- 4.1. Analysis of variance
- 4.2. Chi-square test for crosstabulations
- 4.3. Tests for linear regression