# uc3m Universidad Carlos III de Madrid

### Statistics II

Academic Year: (2022 / 2023) Review date: 13-05-2022

Department assigned to the subject: Statistics Department

Coordinating teacher: KAISER REMIRO, REGINA

Type: Basic Core ECTS Credits: 6.0

Year: 2 Semester: 1

Branch of knowledge: Social Sciences and Law

#### REQUIREMENTS (SUBJECTS THAT ARE ASSUMED TO BE KNOWN)

Statistics I

#### **OBJECTIVES**

#### SPECIFIC SKILLS:

Students will acquire knowledge and skills necessary to:

- 1. Perform statistical inference in one population
- 2. Understand the key concepts in hypothesis testing
- 3. Become familiar with the issues of comparing two populations
- 4. Interpret and apply the concepts of the simple linear regression model
- 5. Carry out the abovementioned analyses in statistical software

**GENERAL SKILLS** 

Students will be able to:

- 1. Develop their ability to think analytically
- 2. Become familiar with a statistical software
- 3. Establish a framework to solve problems
- 4. Develop their interactive skills
- 5. Enhance their critical thinking
- 6. Improve their learning skills and communication

## LEARNING ACTIVITIES AND METHODOLOGY

Theory (3 ECTS): During theoretical sessions, the contents of the course will be introduced, explained and illustrated with examples. Teaching materials will be provided on the Internet.

Practice (3 ECTS): During practical sessions, black-board exercises will be solved. Software-related activities will take place in the computer labs.

In the 15th week of the term, a group-review session for the final exam will be held.

#### ASSESSMENT SYSTEM

60% of the final mark will be obtained from the final exam. To pass the course, a minimum score of 4 (out of 10) on the final exam is required.

The remaining 40% will be based on a continued assessment during the term. Students will be required to demonstrate their understanding of theoretical concepts as well as their ability to apply the theory to solve problems.

The percentages are as follows:

17,5% from the grade in the first midterm exam

17,5% from the grade in the second midterm exam

5% from the evaluation of different activities carried out in class

The activities in class whose evaluation corresponds to the final 5% of the grade may consist of one or several exercises. This number and the evaluation dates will be set by each group instructor according to the rate of progress of the teaching in the group.

% end-of-term-examination: 60 % of continuous assessment (assignments, laboratory, practicals...): 40

## **BASIC BIBLIOGRAPHY**

- Cheng-Few Lee, John C. Lee, Alice C. Lee Statistics for Business and Financial Economics, World Scientific press,
- Newbold, P. Statistics for business and economics., Pearson Prentice Hall, 2010