

## 25643 - Applied Statistics in Health Sciences

### Syllabus Information

**Academic Year:** 2020/21

**Subject:** 25643 - Applied Statistics in Health Sciences

**Faculty / School:** 127 - Facultad de Ciencias de la Salud

**Degree:** 605 - Degree in Physiotherapy

**ECTS:** 6.0

**Year:** 1

**Semester:** Second semester

**Subject Type:** Basic Education

**Module:** ---

### 1.General information

#### 1.1.Aims of the course

#### 1.2.Context and importance of this course in the degree

#### 1.3.Recommendations to take this course

### 2.Learning goals

#### 2.1.Competences

#### 2.2.Learning goals

#### 2.3.Importance of learning goals

### 3.Assessment (1st and 2nd call)

#### 3.1.Assessment tasks (description of tasks, marking system and assessment criteria)

### 4.Methodology, learning tasks, syllabus and resources

#### 4.1.Methodological overview

#### 4.2.Learning tasks

#### 4.3.Syllabus

**Course description:** An introduction to statistical reasoning and data analysis for the health sciences. Coverage includes descriptive statistics, probability models, point estimation, confidence intervals, and hypothesis testing. Critique of selected research articles and case studies incorporating research and evidence-based practice will be adopted to connect statistics to daily work in healthcare field. Statistical computer software (R Commander) will be extensively used for data analysis.

The course will address the following topics:

Topic 1: Introduction to statistical methods in Health Sciences. Basic terminology.

Topic 2: One-dimensional descriptive statistics.

Topic 3: Probability, random variables, and probability distributions.

Topic 4: Statistical inference: point estimation, confidence intervals, and hypothesis testing.

Topic 5: Two-dimensional statistics. Aspectos descriptivos e inferenciales.

#### 4.4.Course planning and calendar

#### 4.5. Bibliography and recommended resources