Statistics for social sciences III

Academic Year: (2022 / 2023) **Review date: 16-05-2022**

Department assigned to the subject: Statistics Department

Coordinating teacher: KAISER REMIRO, REGINA

Type: Electives ECTS Credits : 6.0

Year : 4 Semester :

REQUIREMENTS (SUBJECTS THAT ARE ASSUMED TO BE KNOWN)

Estadistica Aplicada a las CCSS 2

OBJECTIVES

Forecasting Time Serires with ARIMA Models
Logit

DESCRIPTION OF CONTENTS: PROGRAMME

1. Time Series. Forecasting with ARIMA models
 Characteristics of a time series: Frequency, trend and seasonal cycle.
 Concept of a stationary time series
 ACF an PACF
 White noise
 Autoregressive models AR (p)
 Moving average models MA (q)
 ARMA and ARIMA models
 Estimation and diagnosis.
 Forecasting
 Seasonal ARIMA models : identification, diagnosis and prediction.
2. Logistic regression.
 Logit Model Overview.
 Parameter estimation.
 Interpretation of the parameters.
 Model diagnose
3. Extensions

LEARNING ACTIVITIES AND METHODOLOGY

Theory (4ECTS). Lectures with support material available via web.
Practices (2ECTS) Classes in computer classroom. Debates.

ASSESSMENT SYSTEM

There will be a midterm exam. If the exam grade is greater than 5, the student does not need to take the final exam of this part. For these students the final grade is the average between the midterm exam and the final exam (only the second part of the course)

Students who do not pass the midterm exam with more than 6 will take both parts at the final exam. The final grade will be calculated in the most favorable to the student: 50% control and 50% exam or exam grade only.

% end-of-term-examination:	50
% of continuous assessment (assigments, laboratory, practicals…):	50

BASIC BIBLIOGRAPHY

- Peña, D Análisis de Series temporales, Alianza, 2005