Statistics for social sciences III

Academic Year: (2023 / 2024) **Review date: 18-04-2023**

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

50% two midterms.
50% final exam.

For the extraordinary exam the best option for the student will be considered among:

1. 50% of continuous evaluation plus 50% final exam
2. 100% final exam.

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

BASIC BIBLIOGRAPHY

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