uc3m Universidad Carlos III de Madrid

Advanced Topics in Acturial Research

Academic Year: (2018/2019) Review date: 09-05-2018

Department assigned to the subject: Business Administration Department

Coordinating teacher: BALBAS DE LA CORTE, ALEJANDRO

Type: Electives ECTS Credits: 5.0

Year: 2 Semester: 2

REQUIREMENTS (SUBJECTS THAT ARE ASSUMED TO BE KNOWN)

Background in Mathematical Analysis, Probability Theory, Economics and Finance

OBJECTIVES

Research skills in advanced actuarial topics

DESCRIPTION OF CONTENTS: PROGRAMME

- 1) Risk Theory, Risk Measures and Risk Models
- 2) Pensions, longevity and financial products
- 3) Catastrophe Risk
- 4) Gerber-Shiu Function
- 5) Reinsurance
- 6) Dependence
- 7) Credibility

LEARNING ACTIVITIES AND METHODOLOGY

Lectures, exercises, discussions about research papers

ASSESSMENT SYSTEM

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

Exame, 60% Exercises, 20%

Research Papers Analyses, 20%

40