Advanced Topics in Acturial Research

Academic Year: (2021 / 2022) **Review date: 10-07-2020**

Department assigned to the subject: Department of Business Administration

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

Exame, 60%
Exercises, 20%
Research Papers Analyses, 20%

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

BASIC BIBLIOGRAPHY

- Ohlsson and Johansson Non-life insurance pricing with generalized linear models, Springer, 2010
- Yiu Kuen Tse Nonlife actuarial models. Theory, methods and evaluation, Cambridge Universty Press, 2009