uc3m Universidad Carlos III de Madrid

Introduction to actuarial assessment

Academic Year: (2020 / 2021) Review date: 16-05-2020

Department assigned to the subject: Business Administration Department

Coordinating teacher: BALBAS DE LA CORTE, ALEJANDRO

Type: Electives ECTS Credits: 6.0

Year: Semester:

OBJECTIVES

The course will provide the students with knowledge about:

- Pricing life insurance and pension funds.
- Pricing general insurance policies.
- Risk management for insurance companies
- Reinsurance and Credibility Theory.
- Financial derivatives linked to insurance markets.

Finally:

- Collaboration among students will be stimulated, so as to deal with complex practical problems.
- Discussions and critic analyses will be provoked.
- Empirical tests will be encouraged.

DESCRIPTION OF CONTENTS: PROGRAMME

FIRST PART: Life insurance and pension funds. SECOND PART: General Insurance, Risk Theory.

THIRD PART: Reinsurance, Bonus-Malus, Financial Markets.

LEARNING ACTIVITIES AND METHODOLOGY

Methodology will include:

- (1) Lectures, in order to present the main ideas of every topic.
- (2) The use of the computer.
- (3) Numerical exercises.
- (4) More complicated practical situations that will be analyzed by teams of three/four students.

ASSESSMENT SYSTEM

- The weight of the participation in the room will be 5%.
- The weight of several sets of exercises, to be solved at home, will be 15%.
- Two papers developed by teams of three/four students will have the weight 20%.
- The weight of the final exam will be 60%.

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