

Academic Year: ( 2020 / 2021 )

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Department assigned to the subject: Computer Science and Engineering Department

Coordinating teacher: IGLESIAS MAQUEDA, ANA MARIA

Type: Electives ECTS Credits : 3.0

Year : 1 Semester : 2

## OBJECTIVES

- To have and understand knowledge that provides a basis or opportunity to be original in the development and/or application of ideas, sometimes in a research context
- To be able to integrate knowledge and face the complexity of making judgments from information that, incomplete or limited, include reflections on social and ethical responsibilities linked to the application of their knowledge and judgments
- Ability to understand and apply methods and techniques of the sphere of Computer Engineering in the financial markets
- Understand the main concepts related to financial markets
- Participate in the development of financial software, from its conception in the phases of analysis, to its implementation and integration with other systems

### Learning outcomes

- To obtain an overview of financial markets
- To know the life cycle of a financial transaction
- To understand the types of assets and their differences
- To know the different operators in the financial sector
- To understand the national, european and international regulations and understand their implications for the development of financial software
- To understand the implications of data protection laws

## DESCRIPTION OF CONTENTS: PROGRAMME

1. Background: Roosevelt's regulatory design after the crash of the 29.
  - 1.1. Fragmentation of systemic risk: Glass Steagal Act.
  - 1.2. Creation of specialized administrations in the supervision of the market.
  - 1.3. Criminalization of financial offenses and offenses.
  - 1.4. Deposit Guarantee.
2. The OTC derivatives market and its (un) regulation.
  - 2.1. The deregulation process in the US and UK and characteristics of the OTC markets.
  - 2.2. Rating agencies.
  - 2.3. Private associations as a source of regulation: the role of ISDA.
  - 2.4. Increased systemic risk and interdependence among market participants. Cases: Lehman Brothers, AIG.
3. Law making in the European Union.
  - 3.1. Institutions involved and process to approve legislative acts.
  - 3.2. Types of legislative acts.
  - 3.3. The role of European supervisory authorities (ESAs): ESMA, EIOPA, EBA
  - 3.4. The role of ESMA and "delegated regulation".
  - 3.5. The role of the ECB and the way in which decisions are taken.
  - 3.6. The Single Supervisory Mechanism and the Single Resolution Mechanism in the EU.
4. Post-crisis regulatory scenario.

- 4.1. Proposals for the separation of commercial banking from investment banking (EU, US, UK).
- 4.2. Restrictions on proprietary trading (US, EU, UK).
- 4.3. Reduce bilateral and credit risk in the OTC market (clearing mechanism, EMIR Regulation).
- 4.4. Provide information on the parties and instruments in the operations (reporting, EMIR Regulation).
- 4.5. Measures to reduce risk in operations not subject to clearing (EMIR Regulation).
- 4.6. Impact on the ISDA contract, CSA and protocols.

#### 5. MIFID II and MIFIR.

- 5.1. Trading venues, features and differences.
- 5.2. The obligation to trade through trading venues.
- 5.3. Limits on positions in commodity derivatives.
- 5.4. Improve transparency: pre- and post-trade transparency.
- 5.5. Algorithmic and High frequency trading.
- 5.6. Data reporting (MIFIR regulation).

#### 6. Regulation for the prevention of market abuse (MAR).

- 6.1. Insider dealing.
- 6.2. Market manipulation.
- 6.3. Regulation against short selling in the EU and against naked CDS.
- 6.4. Introduction of the manipulation of benchmarks in MAR.
- 6.5. The case of LIBOR and the EURIBOR. Impact, sanctions, regulatory remedies (US, EU).

#### 7. Potential risks of the new regulation.

- 7.1. Accumulation of risk in CCPs. CCP stress test.
- 7.2. Respect for the right to competition in markets: cartel prevention, margin squeeze practices or restriction of market access.

### LEARNING ACTIVITIES AND METHODOLOGY

#### LEARNING ACTIVITIES:

- 1) Theoretical class: Theoretical presentations accompanied by electronic material, such as digital presentations: Total hours: 44 Presenciality: 100%
- 2) Tutorials: Tutorials face-to-face and / or distance learning (videoconference): Total hours: 7.5 Presenciality: 100%
- 3) E-learning activities: Forums of subjects, discussion forums, visualization of pre-recorded content, and other e-learning activities: Contact hours: 44 Presencialidad: 0%
- 4) Individual work of the student: Individual activities of the student complementing the rest of activities (both face-to-face and non-contact), as well as the preparation of exams: Contact hours: 132 Presencialidad: 0%

#### TEACHING METHODS:

- Exhibitions in the teacher's class with support of computer and audiovisual media, in which the main concepts of the subject are developed and the bibliography is provided to complement the students' learning.
- Exhibition and discussion in class, under the moderation of the teacher of subjects related to the content of the subject, as well as of practical cases
- Development of work and reports individually or in groups
- Specific e-learning activities, related to the semi-presential character of the title, including the visualization of recorded contents, self-correction activities, participation in forums, and any other mechanism of online teaching

This subject includes contents of mainly theoretical nature. For this reason, training activities related to the development of practices and/or laboratories are not included.

Intensive use of e-learning methodologies will be used for the presentation of contents and the acquisition of competences by the students. To do this, magisterial classes will be recorded with the theoretical contents that can be visualized off-line by the students. Some content may be acquired by students through individual study supported by tutorials, as well as other e-learning activities. What specific contents are received following some mechanisms or others will be defined at the teacher's discretion, having a ratio of approximately 50% between the presential and the e-learning

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| <b>% end-of-term-examination/test:</b>                                      | 40 |
| <b>% of continuous assessment (assignments, laboratory, practicals...):</b> | 60 |

#### BASIC BIBLIOGRAPHY

- Barth J., Caprio G., Levine R. Bank regulation and supervision: what works best?., Journal of Financial Intermediation, 13, pp. 205-248, 2004
- Beck T. et al. Reaching out: access to and use of banking services across countries. , Journal of Financial Economics, 85 (1), pp. 234-266., 2007
- Beck T. et al.. Banking services for everyone? Barriers to bank access and use around the world. , The World Bank Economic Review, 22 (3), pp. 397-430, 2008
- Beck T., Demirguc-Kunt A., Levine R.. Finance, inequality and the poor. , Journal of Economic Growth, 12, pp. 27-49, 2008
- Beim D., Calomiris C.. Emerging Financial Markets., McGraw Hill Education, 2001
- Santiago Muñoz Machado y José Esteve Pardo (dirs.) Derecho de la regulación económica. I. Fundamentos e instituciones de la regulación., Iustel, 2009