UNIVERSITY OF PIRAEUS

Department of Economics

M.Sc. in Economic and Business Strategy

Banking and FinTech

Instructor

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M.Sc. in Economic and Business Strategy



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Course Overview and Objectives

It is difficult to imagine a world without the internet or mobile devices. They have become core elements of our lifestyle and have brought a high degree of disruption to virtually every area of business. The financial services (FS) industry is no exception; the digital revolution is transforming the way customers access financial products and services. At the intersection of finance and technology lies a phenomenon that has been accelerating the pace of change at a remarkable rate and is reshaping the industry's status quo – it is called FinTech. "FinTech" refers to financial sector innovations involving technology-enabled business models that can facilitate disintermediation, revolutionize how existing firms create and deliver products and services, address privacy, regulatory and law-enforcement challenges, provide new gateways for entrepreneurship, and create opportunities for global growth.

Financial technology is an emergent field that is rapidly innovating, where concerns exist for what this will mean for the future of commerce, markets and banks. Will banks lose out to new players offering better digital products and services, or will they learn

how to assimilate and collaborate with disruptive technologies? How digital currencies like Bitcoin work? Can new currencies, regulation, and digital infrastructure will work together?

The aim of this course in Banking and FinTech is to provide answers to these questions. The overall objective of this course is to analyze the role of banks in the financial system, in order to be able to understand the challenging issues and opportunities confronting bankers now and in the future. This course will examine the role banks play in the global financial system. We will look carefully at how banking has evolved, what the key risks and opportunities, what some of the challenges have been during the recent financial crisis and take a look at what is facing the banking industry over the next few years. Technology and the mobile revolution are rapidly transforming financial markets, institutions, and business models. This course covers topics ranging from blockchain and cryptocurrencies to crowdfunding and P2P lending.

The class will feature case studies and Instructor-led discussions as the key teaching tools. Each class period will be devoted to a different topical issue. The emphasis will be on developing a toolkit to identify and solve problems facing not only banks, but also fintech firms.

The course is divided into two parts.

The first part of the course will deal with modern banking issues with emphasis on risk measurement and management in commercial and investment banking. Emphasis will be placed on the causes and lessons learnt from the recent global financial crisis. Also, in this part we will discuss the main types of risks faced by banks and the use of main risk management techniques. Finally, students will examine the various types of regulations in the credit and capital markets. Micro and macro-prudential regulation Markets in Financial Instruments Directive II (MifiDII), market manipulation and money laundering will be discussed in detail.

The second part of the course is designed to explore FinTech fundamentals, payment and emerging technologies, digital finance and alternative finance for firms and start-ups, cryptocurrencies, blockchain, Initial Coin Offerings (ICOs), crowdfunding, FinTech regulation. Lastly, we would deal with the increasing security and privacy concerns, and operational risks that emerged as part of the FinTech transformation.

Course Learning Outcomes

On completion of this course students will be able to:

CLO 1: Demonstrate a critical awareness of how banking firms make money and how this has been changing over time

- **CLO 2:** Conduct research on how the key risks of managing assets and liabilities are both quantitatively and qualitatively addressed
- **CLO 3:** Develop critical awareness of how banks are regulated and how government policy impacts the behavior of banking firms
- **CLO 4:** Demonstrate a critical awareness of FinTech fundamentals
- **CLO 5:** Critically evaluate how shadow banking and FinTech influences financial stability
- **CLO 6:** Demonstrate a critical awareness of how cryptocurrencies and crowdfunding work
- **CLO7:** Critically evaluate the alternative finance tools available to firms and start-ups

Student Evaluation

Your performance in the course will be evaluated based on one exam (final), case studies group presentations and case study —write up as well as your overall class participation and preparation. The relative weights of each are:

Attendance/Participation	10%
Group Case presentation-Write -up	45%
Final Exam	<u>45%</u>
Total	100%

Detailed Schedule

Week 1 Introduction: Setting the Stage

Class Introduction and Opening Lecture Credit Risk, Risk Management Tools and Structured Finance

Week 2 The global financial crisis and recent trends at the Banking sector Causes, lessons, and the process of Securitization, Credit Rating Agencies, PSI

Week 3 Mergers and Acquisitions

Mergers strategies: market consolidation, market expansion, product expansion

Week 4 Bank Risks

Interest Rate Risk, Market Risk, Credit Risk, Off-Balance Sheet risk

Week 5 Risk management and internal control/auditing.

Liquidity Risk and Management, Asset liability management, Liquidity ratios, Deposit Insurance. Credit risk

Week 6 Bank regulation

Banking supervision, Capital adequacy. The Basel accords (Basel II and Basel III) and Dodd-Frank Act.

Case study

Week 7 FinTech-Fundamentals

Week 8 Cryptocurrencies Bitcoin, Ethereum

Week 9 Crowdfunding

Definition, and different forms

Week 10 P2P Lending

Week 11 Capital Markets Regulation

Markets in Financial Instruments Directive (MifiD), market manipulation, money laundering.

Week 12

Case study group presentations

Course Reading Material and References

- 1) Anthony Saunders and Marcia Cornett, Financial Institutions Management: A Risk Management Approach, McGraw-Hill Irwin, 2018, 9thInternational edition.
- 2) "Digital Disruption How FinTech is Forcing Banking to a Tipping Point", Citi GPS: Global Perspectives & Solutions, Mar 31st, 2016.
- 3) Financial Stability Board (2017) Financial Stability Implications from FinTech Supervisory and Regulatory Issues that Merit Authorities' Attention
- 4)KPMG (2017) "The pulse of FinTech", KPMG, Nov 7th, 2017, https://home.kpmg.com/xx/en/home/insights/2017/10/the-pulse-of-fintech-q3-2017.html