COURSE OUTLINE

1. Information about the programme

1.1 Institution of higher education	**Alexandru Ioan Cuza University of Iasi**
1.2 Faculty	**Faculty of Economics and Business Administration**
1.3 Department (provider)	**Finance, Money and Public Administration**
1.4 Department (beneficiary)	**Management, Marketing and Business Administration**
1.5 Field of study	**Business Administration**
1.6 Level	**Undergraduate**
1.7 Study programme/ Qualification	**Business Administration / Economist**

2. Information about the course

2.1 Course name	**FinTech**					
2.2 Course coordinator	**Silviu Ursu** (Conf. dr.)					
2.3 Seminar coordinator	**Silviu Ursu** (Conf. dr.)					
2.4 Year of study	**3**	**2.5** Semester	**1**	**2.6** Type of assessment*	**E**	**2.7** Course status**	**E**

* MT – Mid-Term / O – Oral Exam / E – Exam / M - Mixed; ** C – Compulsory / E - Elective

3. Total estimated time (hours alloted to teaching activities per semester)

3.1 Number of hours per week	**3**	of which: **3.2** lecture	**2**	**3.3** seminar/lab	**1**
3.4 Number of hours in the curriculum	**42**	of which: **3.5** lecture	**28**	**3.6** seminar/lab	**14**
Time distribution					hrs
Study of the textbook, coursebook, bibliography and lecture notes					**28**
Additional research in the library, online and on the field					**-**
Preparation of seminars/labs, homework, projects, portfolios and essays					**50**
Tutorship					**1**
Assessment					**4**
Other activities.................................					**-**

3.7 Total number of self-study hours	**83**
3.8 Total number of hours per semester	**125**
3.9 Number of credits	**5**

4. Prerequisites (if applicable)

4.1 Curriculum-based	**Microeconomics, Macroeconomics**
4.2 Competence-based	**-**

5. Conditions (if applicable)

5.1 For lectures	▪ Attendance at lectures is strongly encouraged.
5.2 For seminars / labs	▪ Attendance at seminars is strongly encouraged.

6. Specific competencies

Professional competencies	**C1.** Gathering, processing and analyzing information about the interaction external environment – firm/organization **C2.** Assistance for administering the activity of the entire firm/organization
Transversal competencies	**CT2.** Identification of roles and responsibilities in a multi-specialized team and application of networking and efficient work techniques within the team

7. Course objectives (provided by the specific competencies grid)

7.1. Main objective	This course aims to provide students with an introduction to *FinTech*, **the area where finance intersects with information technology**, within the perpetually relevant context of analysing and understanding financial markets and institutions from both a historical and functional perspective. Finance and technology have had a long history of mutual reinforcement, but only since the Global Financial Crisis of 2008 technological and regulatory developments have started to dramatically change the nature of financial markets and institutions and the way financial services and products are delivered. FinTech is not a new concept, but only now, the unprecedented transformation – the *revolution in finance* around the world makes it mainstream. Therefore, this course is designed to get students familiar to the main notions and concepts specific to the financial institutions and markets in financial instruments in the 21st century, with an emphasis on the innovative technology and mobile applications developed by the entrepreneurial community and increasingly integrated into the existing financial system. Upon completion, students will have an understanding of the range of financial services and products in the marketplace, new services and products, financial technology, regulation of financial markets with relevance to new FinTech, how new startups are financed, social issues around new FinTech and possible future developments. Understanding FinTech will help students make sense of the new wave of change as it happens.
7.2. Specific objectives	On completion of the course, students will be able to: ▪ Explain the role and the functions of financial markets, institutions, products and services ▪ Describe the methods of issuing, trading and valuing equity and debt securities and derivatives ▪ Describe "FinTech", current and prospective technology related to financial products and services ▪ Describe FinTech applications to payments, investment management, bank lending, derivatives, financial regulation, financing of startups ▪ Analyse and reflect critically on economic processes, institutions and innovations based on the recent financial news articles, assigned readings, cases and relevant research in finance ▪ Work individually and in teams, present results both in writing and orally, and substantiate decisions taken

8. Content

8.1	Lectures	Teaching methods	Observations (hours & readings)
1.	**Introduction to FinTech and Course Outline** An Overview of Finance, Financial Markets, Financial Institutions, Financial Products, Financial Services, Financial Innovation and Financial Technology	Interactive lecture, Brainstorming, Ungraded quiz	2h: [1], [2], [3]
2.	**FinTech and Money** Payments, Cryptocurrencies and Distributed Ledger Technology / Blockchain	Interactive lecture, Invention activities, Random calling	2h: [2], [4], [6]
3.	**FinTech and Financial Institutions** Commercial Banks, Investment Banks, Central Banks, Brokers, Dealers, Insurers	Interactive lecture, Invention activities, Random calling	2h: [2], [6]
4.	**FinTech and Financial Markets** Underwriting, Trading and Valuation of Financial Securities – Equity, Debt, and Derivatives	Interactive lecture, Invention activities, Random calling	10h: [2], [4], [6], [8]
5.	**Start-up Financing and FinTech** Angel Investing, Venture Capital, Accelerators, ICO, Crowdfunding and Marketplace (P2P) Lending	Interactive lecture, Invention activities, Random calling	4h: [2], [4]
6.	**FinTech in Investment Management** Big Data, Artificial Intelligence, and Machine Learning Text Analytics, Natural Language Processing, Robo-Advisory Services, Algorithmic Trading	Interactive lecture, Invention activities, Random calling	4h: [1], [4], [5]
7.	**FinTech and RegTech** Regulation and Supervision of FinTech	Interactive lecture, Invention activities, Random calling	2h: [2], [3], [4]
8.	**Bubbles, Panics, Crashes, Crises, Financial Innovation and FinTech**	Interactive lecture, Invention activities, Random calling	2h: [2], [6], [7], [8]

Bibliography

Main readings:

[1] CFA[®] Program Reading on *Fintech in Investment Management* (https://www.cfainstitute.org/-/media/documents/support/programs/cfa/cfa-program-level-iii-fintech-in-investment-management.ashx?la=en&hash=7E8E4B151F5FA24E1B21D3A17A3F1BE9E8F3960E)

[2] Hill, J. (2018). *Fintech and the Remaking of Financial Institutions.* Academic Press (https://www.elsevier.com/books/fintech-and-the-remaking-of-financial-institutions/hill/978-0-12-813497-9)

[3] Arner, D.W., Barberis, J., and Buckley, R.P. (2017). *FinTech and RegTech in a Nutshell, and the Future in a Sandbox.* The CFA Institute Research Foundation (https://www.cfainstitute.org/-/media/documents/article/rf-brief/rfbr-v3-n4-1.ashx)

[4] Chishti, S., and Barberis, J. (2016). *The FinTech Book. The Financial Technology Handbook for Investors, Entrepreneurs and Visionaries.* Wiley

[5] Cao, L. (ed.). (2023). *Handbook of Artificial Intelligence and Big Data Applications in Investments.* The CFA Institute Research Foundation (https://www.cfainstitute.org/-/media/documents/article/rf-brief/ai-and-big-data-in-investments.pdf)

[6] Valdez, S., and Molyneux, P. (2015). *An Introduction to Global Financial Markets* (8th ed). Macmillan

[7] Shiller, R.J. (2012). *Finance and the Good Society,* Princeton University Press

[8] Ferguson, N. (2009). *The Ascent of Money: A Financial History of the World* (10th ed.)*,* Penguin Books

Additional readings: May be provided throughout the course via FEAA eLearning or handed-in in class.

8.2	Seminars / Labs	Teaching methods	Observations (hours & readings)
1.	**Fintech** (from 1.0 to 4.0)**:** Disruption and Disintermediation in Financial Products and Services	Small group discussion, Random calling	1h: [1], [2], [3]
2.	**FinTech and the Remaking of Money:** *Apple Pay, Alipay, Mpesa, Bitcoin and Blockchain*	Small group discussion, Case Study, Random calling	1h: [2], [4], [6]
3.	**FinTech and the Remaking of Banks:** *Digital Banks, Fintech in Bank Lending*	Small group discussion, Case Study, Random calling	1h: [2], [6]
4.	**FinTech and Financial Markets** *Underwriting, Trading and Valuation of Financial Securities – Equity, Debt, and Derivatives*	Small group discussion, Simulation, Problem sets in groups, Random calling	5h: [2], [4], [6], [8]
5.	**Start-up Financing and FinTech** *Angel Investing, Venture Capital, Accelerators, ICO, Crowdfunding and Marketplace (P2P) Lending*	Small group discussion, Simulation, Problem sets in groups, Random calling	2h: [2], [4]
6.	**FinTech in Investment Management**: *Big Data, Artificial Intelligence, and Machine Learning Text Analytics, Natural Language Processing, Robo-Advisory Services, Algorithmic Trading*	Small group discussion, Simulation, Problem sets in groups, Random calling	2h: [1], [4], [5]
7.	**FinTech and RegTech:** *Regulation and Supervision of FinTech*	Small group discussion, Simulation, Problem sets in groups, Random calling	1h: [2], [3], [4]
8.	**FinTech, Roles and Responsibilities in the Financial System of the Future**	Small group discussion, Case Study, Random calling	1h: [2], [6], [7], [8]

Bibliography
Main readings:

[1] CFA[®] Program Reading on *Fintech in Investment Management* (https://www.cfainstitute.org/-/media/documents/support/programs/cfa/cfa-program-level-iii-fintech-in-investment-management.ashx?la=en&hash=7E8E4B151F5FA24E1B21D3A17A3F1BE9E8F3960E)

[2] Hill, J. (2018). *Fintech and the Remaking of Financial Institutions.* Academic Press (https://www.elsevier.com/books/fintech-and-the-remaking-of-financial-institutions/hill/978-0-12-813497-9)

[3] Arner, D.W., Barberis, J., and Buckley, R.P. (2017). *FinTech and RegTech in a Nutshell, and the Future in a Sandbox.* The CFA Institute Research Foundation (https://www.cfainstitute.org/-/media/documents/article/rf-brief/rfbr-v3-n4-1.ashx)

[4] Chishti, S., and Barberis, J. (2016). *The FinTech Book. The Financial Technology Handbook for Investors, Entrepreneurs and Visionaries.* Wiley

[5] Cao, L. (ed.). (2023). *Handbook of Artificial Intelligence and Big Data Applications in Investments*. The CFA Institute Research Foundation (https://www.cfainstitute.org/-/media/documents/article/rf-brief/ai-and-big-data-in-investments.pdf)

[6] Valdez, S., and Molyneux, P. (2015). *An Introduction to Global Financial Markets* (8th ed). Macmillan

[7] Shiller, R.J. (2012). *Finance and the Good Society,* Princeton University Press

[8] Ferguson, N. (2009). *The Ascent of Money: A Financial History of the World* (10th ed.)*,* Penguin Books

Additional readings: May be provided throughout the course via FEAA eLearning or handed-in in class.

9. Corroboration of the course content with the expectations of community representatives, professional associations and representative employers from the programme's related field

This course provides students with the core knowledge, skills, and abilities that are generally accepted and applied by finance and investments professionals throughout the world. Topics are selected in accordance to the requirements of **CFA** *Institute Investment Foundations*® Program and Chartered Financial Analyst (CFA) world-leading certification for finance and are correlated to those of similar courses taught at renowned universities. Moreover, it is a student-centered course that follows best practices of learning and teaching in undergraduate education and is continuously updated based on the feedback of students and alumni.

10. Assessment

Type of activity	10.1 Assessment criteria (based on the course learning objectives)	10.2 Assessment methods	10.3 Weight in final grade (%)
10.4 Lectures	▪ Clarity of explanation of the role and the functions of financial markets, institutions, product and services ▪ Accuracy of description of methods of issuing, trading and valuing equity, debt securities and derivatives ▪ Clarity of description of "FinTech", current and prospective technology related to financial products and services ▪ Clarity of description of FinTech applications to payments, investment management, bank lending, derivatives, financial regulation, financing of startups	**Final exam** (multiple-choice, true-false and open questions)	**50%**
10.5 Seminar/ Labs	▪ Quality of work individually and in a team of students ▪ Clarity of speech and ideas and quality of argument, introduction and conclusion in the presentation of the individual and group coursework ▪ Depth and originality of analysis and critical reflection on economic processes, institutions and innovations based on the recent financial news articles, assigned readings, cases and relevant research in finance	**Individual/ group coursework** and their **oral presentation**	**50%**

10.6 Minimum performance standard

▪ Demonstration of the ability to identify, analyse and interpret relevant information on financial markets, financial institutions, financial products and financial services and on FinTech applications to payments, investment management, bank lending, derivatives, financial regulation, financing of startups, taking the responsibility for tasks specific to the role in a team.
▪ Correct answers provided to at least half of questions in the final written examination.
▪ A minimum passing grade of 5, computed as $F = 0.5 \times C + 0.5 \times E$, where F – final grade, C – coursework grade, E – final exam grade.

Date   Course Coordinator   Seminar Coordinator
20.09.2023   Conf. univ. dr. Silviu Ursu   Conf. univ. dr. Silviu Ursu

Date of approval   Head of Department (provider)
26.09.2023   Prof. univ. dr. Ovidiu Stoica

                                           Head of Department (beneficiary)
                                           Conf. univ. dr. Ștefan-Andrei Neștian