Department	International College of Liberal Arts		
Semester	Fall 2023	Year Offered (Odd/Even/Every Year)	Every Year
Course Number	ECON/DATA370		
Course Title	Introduction to Fintech: Reshaping the Financial World		
Prerequisites	None		
Course Instructor	南 峥	Year Available (Grade Level)	3
Subject Area	Global Business & Economics	Number of Credits	3
Class Style	Lecture	Class Methods	Face to face

(NOTE 1) Class Methods are subject to change

(NOTE 2) Depending on the class size and the capacity of the facility, we may not be able to accommodate all students who wish to register for the course″

Course Description	Cap (registrant capacity): 20 students This course introducing financial technologies, or Fintech, is for students wishing to explore the ways in which new technologies are disrupting the financial service industry. Fintech refers to innovations aiming to compete with traditional methods in the delivery of financial services. Among the significant technology trends reshaping the financial world, the class will explore AI, deep learning, blockchain technology, cryptocurrencies, and Open APIs. We will then turn to four sectors of specific opportunities: payments, credit, trading, and risk management. Students will gain an understanding of key technologies, market structure, regulation, and the dynamics of change that Fintech brings. The class will use required readings containing online articles, academic papers, and cases. We've marked readings as essential and optional. Prior preparation of the assigned readings is the necessary background for the lectures and class discussions, mainly as we build upon the material in our sessions. Because Fintech is evolving rapidly, we will occasionally post additional readings via announcements.
Class plan based on course evaluation from previous academic year	This syllabus may alter due to consideration of students' course evaluation and feedback in the previous academic year.
Course related to the instructor's practical experience (Summary of experience)	This course is taught by an instructor with practical experience.

Learning Goals	After successfully completing this course, students should be able to ·Understand emerging Fintech developments reshaping financial services. ·Describe the technologies underlying AI, deep learning, cryptocurrencies, and Open APIs. ·Analyze their impact on the financial services industries. ·How is FinTech reconfiguring financial services and business models? What are the key disruption points? What determines success in FinTech? ·Where are the limits, risks, and broader policy and social implications of FinTech? ·Give a financial recommendation of a Fintech within a particular sector, with clear and well-reasoned points of view.

iCLA Diploma Policy	DP1／DP2／DP3／DP4

iCLA Diploma Policy

(DP1) To Value Knowledge - Having high oral and written communication skills to be able to both comprehend and transfer knowledge

(DP2) To Be Able to Adapt to a Changing World - Having critical, creative, problem-solving, intercultural skills, global and independent mindset to adopt to a changing world

(DP3) To Believe in Collaboration - Having a disposition to work effectively and inclusively in teams

(DP4) To Act from a Sense of Personal and Social Responsibility - Having good ethical and moral values to make positive impacts in the world

Active Learning Methods	This course asks students to engage their learning by thinking, discussing, investigating, and creating. We encourage students to focus on the Fintech articles and academic literature, delve into the underlying fundamentals, struggle with complex questions, explain ideas, and propose solutions.
Use of ICT in Class	The UNIPA functions, like quizzes, Q&A, assignments, feedback, etc. Zoom: 986 508 0375
Use of ICT outside Class	The UNIPA's Q&A function. Email: nan.zheng@c2c.ac.jp The MS Outlook's Bookings website for making an online appointment. https://outlook.office365.com/owa/calendar/MakinganAppointmentwithProfNan@c2c.ac.jp/bookings/
Expected study hours outside class	Generally, students are expected to spend about 2 hours or more preparing for each hour of class sessions.
Feedback Methods	Students are encouraged to meet the instructor during the announced office hours. Contact outside of class sessions is appreciated using emails to the instructor's email address: nan.zheng@c2c.ac.jp. Or, you can book a meeting with me by using the link below: https://outlook.office365.com/owa/calendar/MakinganAppointmentwithProfNan@c2c.ac.jp/bookings/

Grading Criteria		
Grading Methods	Grading Weights	Grading Content
Class participations	20%	
Study questions	30%	
Individual writingup	20%	
Final project	30%	

Required Textbook(s)	There is no assigned textbook. This course is based on online articles and academic papers. Class materials are listed in Class Schedule below.
Other Reading Materials/URL	Please see the class schedule to find Other Reading Materials.
Plagiarism Policy	Plagiarism is the dishonest presentation of the work of others as if it were one's own. Duplicate submission is also treated as plagiarism. Depending on the nature of plagiarism, you may fail the assignment or the course. The repeated act of plagiarism will be reported to the University, which may apply additional penalties.
Other Additional Notes	The class will meet twice for 15 weeks during finals week. We will use one class session giving the lecture and case studies a week; then, we will use one recitation session to review, discuss, and practice. oStudents need to do the reading to contribute effectively to discussion Please come to class prepared to engage, listen, and learn. oStudents should give answers to the study questions before the recitation session, and they should draw on their own experiences and perspectives as much as possible. oThe group research paper (about 3000-4000 words) is due at the end of the semester. Students will work with 3-4 people on this project. However, an individual's contribution to this project should be approximately equal. Finally, each group will present its work with all members' participation. oStudents should read the assigned readings carefully. The lectures synthesize overall views, highlight important points and help understand complex topics but are insufficient by themselves.

(NOTE 3) Class schedule is subject to change

Class Schedule	
Class Number	Content
Class 1	Lecture 1: Introduction Introduction: Key Fintech Trends I Required readings 'The economic forces driving fintech adoption across countries' Jon Frost, BIS Working Papers (February 4, 2020) 'FinTech and market structure in financial services' Financial Stability Board (February 14, 2019) 'The Future of Banking' FDIC Chair Jelena McWilliams (October 1, 2019) 'The banking tech trends that will dominate 2020' American Banker (January 7, 2020) 'Big tech in finance: opportunities and risks' BIS Annual Economic Report (June 23, 2019)
Class 2	Lecture 2 Key Fintech Trends Discussion, and practice Required readings 'The Future of Banking' FDIC Chair Jelena McWilliams (October 1, 2019) Optional Readings The banking tech trends that will dominate 2020' American Banker (January 7, 2020) 'Big tech in finance: opportunities and risks' BIS Annual Economic Report (June 23, 2019)
Class 3	Lecture 3: Artificial Intelligence I AI, machine learning, and deep learning Required Readings 'Artificial intelligence and machine learning in financial services' Financial Stability Board (November 1, 2017) (Pages 3-23, Executive Summary & Sections 1-3) 'The Growing Impact of AI in Financial Services: Six Examples' Arthur Bachinskiy, Medium (February 21, 2019)
Class 4	Discussion, and practice
Class 5	Lecture 4: Artificial Intelligence II AI, machine learning, and deep learning Required Readings 'Artificial Intelligence Applications in Financial Services' Oliver Wyman (December 2019) (Pages 11-30, Section on 'How is AI Applied in Financial Services?') 'Artificial Intelligence & Financial Services - Fall 2019 Report' (PDF – 2.6MB) Mayer Brown (October 2019) (pages 3-13, Section on 'AI and Big Data Regulatory Risks Under Banking and Consumer Financial Laws') 'Fintech: Understanding AI Use in Financial Services' Julie Stackhouse, Federal Reserve Bank of St. Louis (April 29, 2019)
Class 6	Discussion, and practice
Class 7	Lecture 5: Artificial Intelligence III Artificial Intelligence in Finance

Class 8	Recitation, discussion, and practice
Class 9	Lecture 6: Open API Open API and marketing channels Required Readings 'Report on open banking and application programming interfaces (APIs)' Bank of International Settlement (November 2019) 'Fintechs next decade will look radically different' Nik Milanovic, TechCrunch (December 22, 2019) 'RPA in Banking—Use-cases, Benefits and Steps' Maruti Techlabs, Medium Post (November 28, 2019) 'Pros and cons of RPA platforms vs. APIs' George Lawton, TechTarget (September 5, 2019)
Class 10	Recitation, discussion, and practice
Class 11	Lecture 7: Blockchain I Blockchain technology Required Readings 'Even if a Thousand Projects Don't Make It, Blockchain Is Still a Change Catalyst' Gary Gensler, CoinDesk (December 15, 2019) 'Blockchain Technology Overview' Dylan Yaga et al. National Institute of Standards and Technology (October 2018) (pages 1-3, & 7-28, sections 1, 3 & 4)
Class 12	Recitation, discussion, and practice
Class 13	Lecture 8: Blockchain II Blockchain technology
Class 14	Recitation, discussion, and practice
Class 15	Lecture 9: Cryptocurrencies Cryptocurrencies Required Readings 'The technology of retail central bank digital currency' Raphael Auer and Rainer Boehme, Bank of International Settlement (March 1, 2020) 'Bitcoin: A Peer-to-Peer Electronic Cash System' Satoshi Nakamoto (October 31, 2008)

Class 16	Recitation, discussion, and practice
Class 17	Lecture 10 Payments Payment innovations Required Readings 'The Digitalization of Payments and Currency: Some Issues for Consideration' Lael Brainard, Federal Reserve Board (February 5, 2020) '7 Key Payments Innovations in Fintech for 2020' Artur Olechowski, Codete (February 13, 2020) '9 Payment Trends That Will Shape 2020' Estelle Mense, BlueSnap (December 5, 2019)
Class 18	Recitation, discussion, and practice
Class 19	Lecture 11: Credit and Lending I Credit card innovation and big tech firms lending Required Readings 'Apple Card: 12 Fintech Companies Driving Credit Card Innovation' Jeremy Brown, Crunchbase (March 26, 2019) 'Need a loan? There's a tech company for that' Jason Abbruzzese, NBC (November 11, 2019) 'Get to Know Your Marketplace Lenders' American Banker (accessed March 25, 2020) 'Tech lenders push for a piece of the coronavirus, small-business bailout' Kate Rooney, CNBC (March 23, 2020)
Class 20	Recitation, discussion, and practice
Class 21	Lecture 12: Credit and Lending II Lending innovations and alternative data Required Readings 'Peer-to-Peer Lending 101' Jeff Rose, Good Financial Cents (November 20, 2019) 'Alternative Data Across the Loan Life Cycle: How FinTech and Other Lenders Use It and Why (PDF - 2.3MB)' Experian (December 4, 2018) 'US lending at point of sale: The next frontier of growth' Puneet Dikshit, Diana Goldshtein, and Udai Kaura, McKinsey & Company (November 4, 2019) 'Detroit-based mortgage giant Quicken Loans on pace to set home loan record' JC Reindl, Detroit Free Press (December 11, 2019)
Class 22	Recitation, discussion, and practice
Class 23	Lecture 13: Challenger Bankers Challenger Bankers Required Readings 'The Challenger Banks That Threaten to Disrupt Financial Institutions' Bill Streeter, The Financial Brand (February 18, 2020) 'Dawn of The Neobank: The Fintechs Trying to Kill the Corner Bank' Jeff Kauflin, Forbes (November 4, 2019) '2020 will be a challenging year for challenger banks' Romain Dillet, TechCrunch (January 4, 2020) '10 Best Challenger Banks in The World' Crypterium

Class 24	Recitation, discussion, and practice
Class 25	Lecture 14: Trading & Capital Markets The death of brokerage fees and Robo-advisor Required Readings 'How Robinhood Changed an Industry' John Divine, US News (October 17, 2019) 'Charles Schwab and the New Broker Wars' Daren Fonda, Barron's (October 4, 2019) 'The Death of Brokerage Fees Was 50 Years in the Making' Stephen Mihm, Bloomberg (January 3, 2020) 'Robo-Advisors: Product vs. Platform' Henry O'Brien, The Startup (June 10, 2019) '8 Best Robo-Advisors of 2020', Eric Rosenberg, The Balance (November 20, 2019)
Class 26	Recitation, discussion, and practice
Class 27	Lecture 15: Insurance Exchange rates and other macroeconomic variables Required Readings 'Quarterly InsurTech Briefing Q4 2019', CB Insights (January 2020) (excerpts only—Introduction & The Data Center Charts) 'Three insurtech trends to watch in 2020', Harry Menear, FinTech (March 11, 2020) 'Fintech developments in the insurance industry—Executive Summary' Bank of International Settlement (February 28, 2019) 'Why Asia is fertile new ground for the insurtech startup movement', Optional Readings 'The Future of Insurance: Fintech 50 2020', Ashlea Ebeling, Forbes (February 12, 2020) 'Top 15 insurtech companies in the US', Geraldine Grones, Insurance Business News (January 17, 2020) 'How Insurtechs are Transforming Insurance Underwriting—7 Examples', Accenture Insurance (August 30, 2018)
Class 28	Recitation, discussion, and practice
Class 29	Lecture 16: Coronavirus Crisis Coronavirus crisis and finance '8 top Fintech VCs discuss COVID-19 trends, signals and opportunities' Natasha Mascarenhas, Alex Wilhelm, and Arman Tabatabai, TechCrunch (April 21, 2020) 'Is the Coronavirus Killing Off Cash?' Nancy Scola, Politico (April 17, 2020) 'Fintech firms race to plug gaps in UK's coronavirus relief measures' Ryan Browne, CNBC (April 23, 2020) '7 VCs look into the future of Fintech' Alex Wilhelm, Natasha Mascarenhas, and Arman Tabatabai, TechCrunch (April 23, 2020)
Class 30	Recitation, discussion, and practice