

**East China Normal University**

**FINA 35 – Blockchain for Business**

**Instructor:** Jackson Mi

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**Home University:** Shanghai Maritime University

**Semester:** December 19, 2022 to January 7, 2023

**Course Hour:** Monday through Friday, 160 mins per teaching day;

**Total Contact Hours:** 64 contact hours

**Credits:** 4

**Location:** Online

**Designated Textbook with ISBN:** Nascimento, A.(2019). The STO Financial Revolution: How Security Tokens Change Businesses Forever, Independently published, ISBN-13 : 979-8554449574

Mougayar, W. (2016). The Business Blockchain : Promise, Practice, and Application of the Next Internet Technology. Hoboken, New Jersey: Wiley. ISBN-13: 978-1119300311

Lipovyanov, P.(2019)Blockchain for Business 2019, Packt Publishing, ISBN-13: 978-1-78995-602-3

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## Course Overview

Blockchain is disrupting the global financial industry and changing the way we view money and business. This course lays the foundation to help you gain an understanding of the market implications and business opportunities associated with blockchain and cryptocurrencies. Gain the competitive advantage in understanding how cryptocurrencies function in the finance blockchain space. Topics include Bitcoin and new cryptocurrencies, DeFi, loans, real estate, security tokens, and other investment examples. In addition, this course provides an overview of the business opportunities associated with how security tokens, as the digital assets and cryptocurrencies compliant and regulated by governmental agencies, can revolutionize industries such as finance, real estate, and venture capital, among others. This course aims to cover the factors and principles that govern the planning, organizing, and managing of cryptocurrencies, digital assets, and blockchain-based companies or new ventures. Discussions will center on understanding how cryptocurrencies and blockchain will change the way we think about money, disrupt the role central banks have in conducting monetary policy, and empower the unbanked. Students should leave the course with a comprehensive understanding of the global competitive landscape and core concepts of how to evaluate cryptocurrencies and blockchain investments.

## Learning Outcomes

After completing this course, the student will be able to:

- Theoretical knowledge of the main concepts and properties of blockchain technologies
- Experience in analysis of practical cases of blockchain application
- Ability to identify and assess perspectives of enterprise blockchain applications
- Describe the differences between various crypto currencies such as Bitcoin, Ethereum, Litecoin, Ripple etc.
- Understand the differences and relationships between Cryptocurrency, Blockchain, and Smart Contracts.
- Comprehend the business applications and opportunities of Blockchain in various industries.
- Grasp a basic understanding of fundraising through security tokens, utility tokens and ICOs.
- Develop and pitch a new entrepreneurial idea that involves the use of Blockchain, Cryptography and/or Smart Contracts.



### Grading Scale and Notes

The following definitions will be used as a guide for the assignment of grades:

Number Grade	Letter Grade	Definitions
94-100	A	Extraordinary distinction, indicating a full mastery of course content and excellent work.
90-93	A-	
87-89	B+	Strong performance demonstrating a high level of attainment, indicating a good comprehension of the course material and the student's full engagement with the course requirements and activities.
84-86	B	
80-83	B-	
77-79	C+	Acceptable performance, demonstrating an adequate and satisfactory comprehension of the course material and the student has met the basic requirements for completing assignments and participating in class activities.
70-76	C	
60-69	D	A marginal performance in the required exercises demonstrating a minimal passing level of attainment.
0-59	F	An unacceptable performance. The F grade indicates that the student's performance has revealed almost no understanding of the course content.

### Assessment Policy

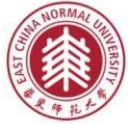
Assessment	Final Grade
Quiz	30%
Mid-Term Examination	30%
Final Examination	30%
Attendance	10%



## Course Schedule

Course Weeks	Topics to be covered
<u>Week1</u>	<ul style="list-style-type: none"> <li>History of Bitcoin</li> <li>Cryptocurrencies</li> <li>Blockchain</li> <li>Smart Contracts</li> <li>Basics of Cryptography &amp; Cryptocurrencies</li> </ul> Review Final Project - New Business Venture using Blockchain, Cryptogram The foundation of how Blockchain work <ul style="list-style-type: none"> <li>Smart Contracts and their Applications</li> </ul>
<u>Week2</u>	<ul style="list-style-type: none"> <li>Blockchain Disruption of the Finance Industry               <ol style="list-style-type: none"> <li>Blockchain Vs. Banks</li> <li>Exchange-Traded Funds - ETFs</li> <li>ICOs and Exchanges</li> <li>Fintech Disruption</li> </ol> </li> </ul> Decentralized Finance <ul style="list-style-type: none"> <li><u>Other Industries Disrupted by Blockchain</u> <ol style="list-style-type: none"> <li>Retail</li> <li>Energy</li> <li>Legal</li> <li>Food</li> <li>Hospitality</li> <li>Supply Chain</li> <li>Healthcare</li> </ol> </li> </ul> Insurance
<u>Week3</u>	<ul style="list-style-type: none"> <li>Blockchain, Tokens and Smart Contracts</li> <li>Concept and application of Decentralized Finance (DEFI)</li> <li>DeFi Case Studies</li> </ul>

Date	Lecture	Reading/Assignments/ Examination
Day 1	Bitcoin, Blockchain, and Cryptoassets	Reading: Lipovyanov Ch1
Day 2	A Brief History of Money	Reading: Lipovyanov Ch2
Day 3	The Birth of Bitcoin and the Advantages of a Decentralized Payment System	Reading: Lipovyanov Ch3
Day 4	Five Forces of Bitcoin	Reading: Lipovyanov Ch4,5
Day 5	Five Forces of Bitcoin Quiz 1	Reading: Lipovyanov Ch6 Assignments Quiz 1
Day 6	Five Forces of Bitcoin	Reading: Lipovyanov Ch7,8



Day 7	How Ethereum Took the Idea of Blockchain to the Next Level	Reading: Lipovyanov Ch9
Day 8	Midterm-exam	<b>Examination</b>
Day 9	Ethereum - A Global Platform for Decentralized Applications	Reading: Lipovyanov Ch10
Day 10	Blockchains Focused on Specific Sectors and Use Cases	Reading: Lipovyanov Ch11
Day 11	Corporate Blockchains Quiz 2	Reading: Lipovyanov Ch12 <b>Assignments Quiz 2</b>
Day 12	The Disruptive Potential of Blockchain Technology	Reading: Lipovyanov Ch13 Nascimento Ch1-3
Day 13	Blockchain and AI Quiz 3	Reading: Lipovyanov Ch14 Nascimento Ch4-5 <b>Assignments Quiz 3</b>
Day 14	Current Issues and Potential Solutions to Take Blockchain to the Next Level	Reading: Lipovyanov Ch15 Nascimento Ch6-7
Day 15	Final exam	<b>Examination</b>