



Lincoln University

BA 380 – Blockchain and Digital Currencies

COURSE SYLLABUS

Spring 2022

- Instructor:** Prof. Alexander Anokhin, PhD
Lecture Schedule: Wednesday, 3:30 PM – 6:15 PM
Office hours: Wednesday, 2:00 PM – 3:00 PM
Virtual Zoom:
Classroom: <https://lincolnuca-edu.zoom.us/j/4929867479>
Credits: 3 units / 45 lecture hours.
Level: Mastery 2 / (M2)
Email: aanokhin@lincolnuca.edu
- Required textbook:** Ammous, S. (2018) *The Bitcoin Standard: The Decentralized Alternative to Central Banking*. Wiley, 1e, ISBN-10:1119473861; ISBN-13:978-1119473862

Last Revision: January 17, 2022

COURSE DESCRIPTION

This course is designed to introduce students to the technology of blockchain, fast-developing fields of digital currencies, and related industries. We will detail the problems that blockchain technology set out to solve, analyze its impact on economic, finance, social, and political world, and discuss its growing number of use cases. We will aim to provide a solid non-technical understanding of the mechanisms involved in functioning of cryptocurrencies and build a framework for the understanding of regulatory issues related to digital currencies.

(3 units) *Prerequisite: Instructor's permission*

COURSE LEARNING OUTCOMES¹

	Course LO	Program LO	Institutional LO
1	Evaluate the key mechanisms of functioning of decentralized digital currencies.	PLO 1	ILO 1b
2	Discuss what problems are solved by blockchain technology and evaluate the impact these solutions have on the society.	PLO 3	ILO 7b
3	Analyze the impact decentralized digital currencies have on the development of Web3.	PLO 7	ILO 6b

PROCEDURES AND METHODOLOGY

This is an online course.

Lecture method is combined with in-class discussions, case studies and home assignments of various kinds. Students are expected to complete assigned readings before connecting to class.

This course contains a lot of theoretical and abstract ideas that can only be made practical through class activities and discussion. Therefore, class participation is essential to the success of the course.

CLASS RULES

1. Class attendance is required. Attendance will be taken each class at a time chosen by the instructor.
2. Students are required to arrive to class on time. Showing up late disturbs the natural flow of the lecture and affects everyone's experience.
3. All in-class activities, exams, assignments, and projects must be completed and handed in on time. Late submissions will result in lower grade (each day of delay costs 5% points).
4. Detected cheating/plagiarism will result in "F" for the assignment/exam.
5. Submission of all assignment has to be done using Canvas web service. No hard copy or email submissions will be accepted.

EXAMS

The exams (midterm and final) will consist of questions based on lectures and supplementary reading as well as case studies / practical assignments.

The final exam will be comprehensive, with a special emphasis given to several key topics of the course (this will be further explained in class).

¹ Detailed description of learning outcomes and information about the assessment procedure are available at <https://acqa.lincolnuca.edu/learning-outcomes-assessment/>

INDIVIDUAL PROJECT

Every student must prepare a report for presentation in class.

The report has to focus on a selected problem associated with digital currencies or blockchain technology. The specific topic will be defined in consultations with instructor.

Students are expected to present their reports during the class (using visual aids) as well as submit a written report.

Individual Project Grading Criteria:

- Content
- Use of time
- Style

Reports must comply with the Lincoln University guidelines.

GRADING POLICY

All assignments, quizzes, projects and exams are evaluated using the indicated system:

94-100	A	73-76	C
90-93	A-	70-72	C-
87-89	B+	67-69	D+
83-86	B	60-66	D
80-82	B-	0-59	F
77-79	C+		

Tentative Weights

Participation (In-class activities, home assignments)	25%
Individual Project	25%
Midterm Exam	20%
Final Exam	30%

COURSE SCHEDULE

Date	Topic
1/26	A Brief History of Money And Trust
2/2	The Byzantine General's Problem
2/9	Basics of Cryptocurrency: Public/private keys, transactions, mining.
2/16	Applied Bitcoin 1: Wallets, Sending/Receiving, Cold Storage.

2/23	Applied Bitcoin 2: Constructing Transactions, Mining, Lightning Network.
3/2	Midterm Exam
3/9	Ethereum and Other Digital Ledgers. Proof of Stake
3/16	SPRING RECESS – NO CLASS
3/23	Use Cases: Cryptocurrencies, NFTs, DAOs
3/30	Entrepreneurship and Innovation on The Blockchain.
4/6	Cryptocurrency and Central Banking
4/13	Cryptocurrency and Financial Institutions
4/20	Regulatory and Tax Treatment
4/27	Cryptocurrency and The Developing World
5/4	Course Project Presentation
5/11	Final Exam