

University of Louisville
Blockchain
Spring 2021

Professor: Dr. Lori Tang

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Office: College of Business, Room 274

Virtual Office Hours: 8:00 -10:00 a.m. & 11:00 a.m. – noon. Monday through Collaborate or by appointment

Class Dates: March 15 – April 18, 2021

Course Description and Objective:

The purpose of this course is to explore Blockchain concepts and how to apply them in a wide range of real business scenarios and explore unique, challenge-based business scenarios using design thinking methodology.

The objective of this course includes:

- Understand the basic concepts and status of Blockchain.
- Understand the important aspects of designing a blockchain-based solution.
- Have a deep understanding of various real world blockchain implementations and blockchain use cases.
- Develop an introductory understanding of Blockchain regulation.
- Be able to use design thinking technique to develop first blockchain use case

Course Format:

This is an online class. Be warned, this is a very intensive and demanding course, which will require a lot of your time and energy during the five weeks. Students are expected to watch the class videos and complete the assignments and group projects within the assigned period.

Exam and Grading:

Assignment	10%
Design Thinking Project for Blockchain Use-case Selection	30%
Group Project: Presentation on Blockchain Implementation	30%
Final Exam	<u>30%</u>
Total	100%

90% ≤ A- < 94%; 94% ≤ A < 97%; A+ ≥ 97%;

80% ≤ B- < 84%; 84% ≤ B < 87%; 87% ≤ B+ < 90%;

70% ≤ C- < 74%; 74% ≤ C < 77%; 77% ≤ C+ < 80%;

F < 70%

Assignment (10%)

We will have one assignment for this class. During week one, please write a paragraph introducing yourself. It can be anything you would like to share with me to let me know more about you or anything you think I can help you to succeed in this class. Write down one paragraph about your hopes and fears for this course. Please turn in this assignment on Blackboard → Assignment by the end of first week (by midnight of **March 21**).

Design Thinking Workshop for Blockchain Use-case Selection (30%)

We will conduct a design thinking workshop for blockchain first-use case selection during **Week Four class**. Students will form a group of three or four to participate in selecting first Blockchain use case using design thinking method. I will create a Collaborate meeting room for each group to meet and record their presentation. Please submit the team information (group member names) by the end of first week (by midnight of **March 21**) and I will assign the group numbers.

Students should watch the class video before starting to work on the project. The class video will be posted during the fourth week providing guidance on participating this project. Students are required to submit a presentation video by the end of the fourth week (by midnight of **April 11**).

The grade of group presentation is determined by presentation skills, slides, and content. To be more specific with the content coverage, it should contain but not limited to the following subjects:

1. Understand the concepts and elements of blockchain.
2. Understand why design thinking is so perfect for blockchain first projects (we need to cut through the hype factor to make blockchain real).
3. Select, understand, expand and elaborate the use-case.
4. Make sure that the selected use case leverages blockchain attributes.
5. Map out the players in the business network.

Group Project: Real World Blockchain Implementation (30%)

There are many Blockchain implementations and use cases up to date, such as Bitcoin, Ethereum, Corda, Ripple, T ZERO, MadHive, GeminiDollar and Exchange, and Transferwise, etc. The same group of students will select a real world blockchain implementation and develop a comprehensive and deep understanding of this implementation, including but not limited to its history, application, benefits, issues, and future development etc. Each group will meet, record, and turn in the recorded presentation (about 20-minute long) and a report (about 5-10 pages including all figures, tables, and references, etc. COB standard) on this project by the end of the last week (by midnight of **April 18**).

Final Exam (30%)

The final exam is an open-book and open-resource test. It will be made available during April 16-18 and you can choose any time during the three-day period to start the test. Once you start the test, you will have three and a half hours to complete the test. The test will have to be your own work, which means collaboration with other students is prohibited. A make-up exam will only be given if the student can demonstrate extenuating circumstances. I reserve the right to require proof, if necessary in writing, of these circumstances.

Cheating AND Plagiarism:

I take the issue of cheating and plagiarism seriously. Please report any violations to me. I encourage cooperative work among students on homework assignments and group projects. You must agree not to cheat on exams; and to inform me if you are aware other students cheating. The exam must be your own work.

Cheating

Cheating is the actual or attempted practice of fraudulent or deceptive acts for the purpose of improving one's grade or obtaining course credit; such acts also include assisting another student to do so. Typically, such acts occur in relation to examinations. However, it is the intent of this definition that the term 'cheating' not be limited to examination situations only, but that it include any and all actions by a student that are intended to gain an unearned academic advantage by fraudulent or deceptive means.

Plagiarism

Plagiarism is a specific form of cheating which consists of the misuse of the published and/or unpublished works of others by misrepresenting the material (i.e., their intellectual property) so used as one's own work."

Penalties for cheating and plagiarism range from a 0 or F on a particular assignment, through an F for the course, to expulsion from the university.

Student with Disabilities:

The University of Louisville is committed to providing access to programs and services for qualified students with disabilities. If you are a student with a disability and require accommodation to participate in and complete requirements for this class, contact the Disability Resource Center (Robbins Hall, 852-6938) for verification of eligibility and determination of specific accommodations.

Student Responsibilities/College and University issues

University of Louisville student conduct and responsibilities

This course will abide by University of Louisville student conduct and responsibilities with regards to ethics and related issues:

<http://louisville.edu/dos/students/policies-procedures/student-handbook.html#codeofstudentconduct>

College of Business student conduct and responsibilities

This course will abide by College of Business student conduct and responsibilities with regards to ethics and related issues:

<http://business.louisville.edu/students/college-of-business-academic-dishonesty-policy>

Religious holiday conflict policy

<http://louisville.edu/diversity/resources/work-restricted-holy-day-policies-calendar.html>

University policy on equal access

<http://louisville.edu/disability/policies-procedures>

Title IX/Clery Act Notification

Sexual misconduct (including sexual harassment, sexual assault, and any other nonconsensual behavior of a sexual nature) and sex discrimination violate University policies. Students experiencing such behavior may obtain confidential support from the PEACC Program (852-2663), Counseling Center (852-6585), and Campus Health Services (852-6479). To report sexual misconduct or sex discrimination, contact the Dean of Students (852-5787) or University of Louisville Police (852-6111).

Disclosure to University faculty or instructors of sexual misconduct, domestic violence, dating violence, or sex discrimination occurring on campus, in a University-sponsored program, or involving a campus visitor or University student or employee (whether current or former) is not confidential under Title IX. Faculty and instructors must forward such reports, including names and circumstances, to the University's Title IX officer. For more information, see the Sexual Misconduct Resource Guide (<http://louisville.edu/hr/employeerelations/sexual-misconduct-brochure>)

Tentative Course Outline:**Week One:****Syllabus; Overview****Introduction to Blockchain****Blockchain Implementations**

Students are expected to

- Watch the class videos

- Complete the first assignment and turn in the individual work by the end of first week (by midnight of March 21).

Assignment: Please write a paragraph introducing yourself. It can be anything you would like to share with me to let me know more of you or anything you think I can help you to succeed in this class. Write down one paragraph on your hopes and fears for this course. This assignment is due by midnight on March 21.

- Form a group of 3 or 4 students to work for future workshop on design thinking for blockchain use case and group project for blockchain implementations; Group information is due by the end of first week.

Week Two:**Blockchain Status****Identifying When to Use Blockchain****Regulating Blockchain Applications**

- Student are expected to
- Watch class videos

Week Three:

Blockchain Use-cases

Designing a Blockchain Network

- Student are expected to
- Watch class videos

Week Four:

Design Thinking Workshop for Blockchain Use Case Selection

- Student are expected to
- Watch class video
 - Workshop: *Use Design Thinking method to select and elaborate a blockchain first use case; Students will meet in the Collaborate Meeting Room, record the presentation, and turn it in before the end of Week Four (by midnight of April 11)*

Week Five:

Group Project Presentation

- *The same group of students will select a real world blockchain implementation and develop a comprehensive and deep understanding of this implementation, including but not limited to its history, application, and pros and cons, etc. Each group will turn in the recorded presentation and a report on this project by the end of Week Five (by midnight of April 18).*

Final Test

Important: This syllabus and schedule are subject to change in the event of extenuating circumstances. If you are absent from class, it is your responsibility to check on announcements made while you were absent.