NEW YORK UNIVERSITY
Stern School of Business
Accounting and Blockchain Technology
Fall 2025

Professor: Amal Shehata, CPA (She, Her, Hers)

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Professor Office Hours:

- Tuesdays from 3:45 - 5:00 pm in person in my office KMC 10-90, please sign up for an in-person time slot on this spreadsheet.
- Wednesdays from 12:15-1:15 pm in person or Zoom (no sign up, just join the Zoom): https://nyu.zoom.us/j/6338208015

If these times do not work, please reach out to schedule an appointment.

Teaching Fellow: Abhinav Lingareddy
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Office Hours: By appointment

Course Description

A few predictions in the news:

Deloitte whitepaper: *"The blockchain technology has the potential to shapeshift the nature of today's accounting. It may constitute a way to vastly automate accounting processes in compliance with the regulatory requirements...A cascade of new applications will likely follow that are built on top of each other, leading way for new, unprecedented services."*

PwC Time for Trust report*: "PwC's… analysis suggests that the technology could add $1.76 trillion to the global economy by 2030."*

This course will explore the many dimensions of the accounting industry that will be impacted by blockchain technology. We will begin with the history of the existing financial reporting framework and an overview of how blockchain functions, exploring why and how Accounting processes are open to disruption and improvement from blockchain. We will then spend subsequent class periods examining specific areas, including financial reporting, auditing, tax services, the regulatory framework (or lack thereof to date), the criticisms and limitations of blockchain and more.

Learning Objectives

1. Examine the history of the double-ledger accounting system, identifying weaknesses and opportunities for improvement that blockchain could provide;
2. Analyze the obstacles involved with adopting blockchain and the weaknesses of the technology with a critical mindset;
3. Understand how blockchain will transform business and peer-to-peer activity and the related implications;
4. Research the status of the regulations across different dimensions, such as GAAP and IFRS, and determine how to apply existing rules to blockchain activity;
5. Deliberate on issues including trust, privacy concerns and threats to traditional accounting;
6. Reflect on the proliferation of tokenization of assets, such as stablecoins, NFTs, CBDCs, utility tokens and more and consider the impact on our lives and our future;
7. Analyze real-world use cases of blockchain in business, with a particular focus on the accounting improvements, risks and implications;
8. This course will **not** explore the technical coding of blockchain (I will recommend several FinTech courses at Stern for this type of curriculum).

Required Material

Given that this is a half semester class, I am only using free resources or those I have created myself. Assignments for the course will be posted as links and they will consist of my slides, readings, podcast listenings or video viewings. Please do not share or post my material outside of our class community. I will post a student version of my slides on Brightspace by 11am the morning of our class. Please bring a digital or printed copy of the slides so you can take notes.

Brightspace Learning Management System

I will use Brightspace extensively to lay out our class schedules with pre and post assignments, email you, post PDFs of our slides, relevant articles and other course material so please make sure you are correctly registered and checking our site on a regular basis. It is your responsibility to check the assignment schedule on Brightspace. Please note that due to the evolving nature of the subject matter, material may be updated as we go through the course.

Use of GenAI in our Class:

GenAI can be a powerful thought partner for some of our work but learning can only happen as a result of effort on your part. The use of genAI related tools is allowed in

this class **only in ways noted in the assignments**. Please consider these tools as an assistant to achieving our learning objectives.

I will do my best to be specific about when genAI is and is not permitted but please do your part by citing your work clearly when you use genAI. When in doubt, for every assignment, you should include a description of:

- Which tools and techniques you used (include your prompts, plugins used, etc.);
- Which parts of the assignment you used them for;
- What you think you learned from the work you did, and why you think that matches the goals of the assignment.

In any use of AI-generated material, you are responsible for its accuracy, and will be graded down for not catching errors the tool generates. You are also responsible for understanding the material in your assignments; I may ask you to elaborate on any work you hand in. As a reminder, taking credit for work you did not create is a violation of NYU's Academic Integrity policy.

Guest Speakers

We are very fortunate that this course will feature a number of guest speakers from the industry. I have worked closely with each speaker over the past few months to develop the custom curriculum for our class. Many of the speakers are prominent in the blockchain space and have limited availability so we may have to deviate from the syllabus based upon their schedules.

Course Schedule

We will have 7 class sessions, beginning Wednesday, September 3, 2025. Our class is from 2 - 4:45pm in UC-21.

Grading

Preparation, Participation & Attendance	15%
Final Quiz	20%
Weekly Class Assignments	35%

Research Assignment	18%
Blockchain Team Interview Assignment and Presentation	12%

Instructions for each component of the grade is below:

Attendance and Participation

Attendance is expected for this class and it will help us achieve our learning objectives as we will have small group discussions, guest speakers and the chance to discuss and analyze topics as a group. Given that we only have 7 sessions, students are expected to attend every class, engage in the discussions and stay for the duration. Please note that attendance credit is earned by being in our classroom in person; **any misrepresentation of attendance represents a violation of our Stern Honor Code**.

I hope you will be an active participant in class. I will be prepared for class and make every effort to create a hospitable and inclusive environment where you feel comfortable expressing your ideas. By registering for this course, I expect you to make the same effort in return. If ever you feel this is not an inclusive environment, please reach out to me so we can discuss this together. I reserve the right to adjust your final grade based on your level of participation and professionalism in class. If you must miss class for exceptional reasons, please notify me and I can provide the class recording.

After-Class Reflection Memo:

After each class session, I will provide a memo for you to reflect on your key take-aways and share any areas of confusion. The research on adult learning indicates that students who immediately reflect on curriculum have a higher rate of retention. In addition to this benefit, the memos provide me with insight into any topics that need further clarification. Completing these memos **within 24 hours** of our class session will count towards a portion of your participation grade.

Weekly Class Assignments

Weekly assignments will be posted on Brightspace. These assignments will provide the opportunity for deeper reading and reflection. Most students will not find the topics overly difficult, but the workload is steady and condensed over a short period of time. Please consider this course as a career investment rather than just another step towards graduation or GPA goals. With this perspective, you will be able to put learning first and foremost.

Blockchain Team Interview Assignment

Teams of 3-4 students will have the opportunity to interview a professional working in the blockchain industry. Full instructions will be provided separately.

Quiz

We will have 1 quiz in our final class of the semester. The quiz will be multiple-choice/short answer and the questions will be based on class lectures, assignments and exercises we have completed in class.

Course Schedule

Please note that the schedule is subject to change.

Date	Topic	Deliverables by 11:59pm on the date listed

Class 1: September 3	**Blockchain Technology, the History of Accounting & Challenges and Criticisms of Blockchain Technology** ● The origin of the double-entry ledger system with a focus on why this became the basis for our capital markets system and why it is ripe for the change that blockchain represents. ● Introduction of blockchain technology, the difference between bitcoin and blockchain, what benefits and challenges are inherent in the technology. ● How do we separate the benefits of blockchain from benefits from other (related) tools (ie, smart contracts)?	Assignment 1: Blockchain Reflection Discussion Board Due Date: Tuesday, 9/9
Class 2: September 10	**Blockchain in Practice and Tokenization of Assets:** ● Types of blockchain and consensus mechanisms. ● The integration of smart contracts within a blockchain. ● DAO - Decentralized autonomous organizations. ● Tokenizations: The definition, types of, challenges and benefits of tokenization. ● Security Tokens and Utility Tokens and their account considerations	Assignment 2: Utility Tokens: A Deeper Review Due Date: Tuesday, 9/16

Class 3: September 17	**Continue Tokenization of Assets** ● Currency tokens: types, benefits and examples, and assess the regulatory status of various countries. Specific focus on: ○ CBDC ○ Crypto/bitcoin ○ Stablecoin ● Non-Fungible Tokens (NFTs). ● Accounting considerations of currency tokens and NFTs	Assignment 3: Financial Reporting of NFTs Due Date: Tuesday, 9/23
Class 4: September 24	**Interpreting and applying the accounting rules to crypto-assets** ● Pre-Class Reading Requirement ● Contrast the political "friendliness" of various countries. ● How to interpret and apply existing GAAP and IFRS rules to blockchain. ● Contrast different accounting treatments for public companies. ● Accounting Research Spotlight ● Team meeting time	Assignment 4: Accounting Research Assignment Due Date: Tuesday, 9/30
Class 5: October 1	**Blockchain Implications for the Future Audit** ● Pre-class reading: Auditing Crypto-Assets ● How will blockchain technology change the audit and how are the auditors preparing? ● Will it change how quickly they provide the audit? Will it improve the quality of the audit? ● How do you audit crypto assets, with a specific focus on stablecoins and NFTs? We will welcome the CBIZ auditors of Grayscale to demonstrate the audit of crypto assets.	Assignment 5: Auditing and Digital Assets Due Date: Tuesday, 10/7

Class 6: October 8	**Blockchain Implications for the Future of Tax:** ● Subject Matter Expert, Luiza Romero, to demonstrate Tax use-cases. ● A brief history and review of the current income tax process ● Trust, governments and the potential for blockchain; use-case examples of governments that are using blockchain for tax purposes. ● Tax assessments on blockchain use-cases. ● A detailed look at the concept of Country of Origin and how blockchain technology could impact this complex, global tax structure	No new assignment this week; focus on your team assignment.
Class 7: October 15	● Our last class! ● Final Quiz ● Team Presentations	Team Interview Assignment **Due Date:** Tuesday, 10/14

After this class: Recommended Stern FinTech courses related to blockchain:

- Digital Currency, Blockchains and the Future of Financial Services (offered each semester by Professor David Yermack)
- Foundations of FinTech (offered each semester by several faculty),
- Blockchain and Cryptocurrencies: Technical and Strategy Perspective (offered by Professor Hanna Halaburda)
- Topics in Blockchain & Cryptocurrency Investing by Professor Ian D'Souza.
- More technical courses are also available at Courant and Tandon.

ACADEMIC INTEGRITY

Our Academics Pillar states that *we take pride in our well-rounded education and approach our academics with honesty and integrity*. Indeed, integrity is critical to all that we do here at NYU Stern. As members of our community, all students agree to abide by the NYU Stern Student Code of Conduct, which includes a commitment to:

Exercise integrity in all aspects of one's academic work including, but not limited to, the preparation and completion of exams, papers and all other course requirements by not engaging in any method or means that provides an unfair advantage.

Clearly acknowledge the work and efforts of others when submitting written work as one's own. Ideas, data, direct quotations (which should be designated with quotation marks), paraphrasing, creative expression, or any other incorporation of the work of others should be fully referenced.

Refrain from behaving in ways that knowingly support, assist, or in any way attempt to enable another person to engage in any violation of the Code of Conduct. Our support also includes reporting any observed violations of this Code of Conduct or other School and University policies that are deemed to adversely affect the NYU Stern community.

The entire Stern Student Code of Conduct applies to all students enrolled in Stern courses and can be found here: www.stern.nyu.edu/uc/codeofconduct

To help ensure the integrity of our learning community, prose assignments submitted to Brightspace will be submitted to Turnitin. Turnitin will compare your submission to a database of prior submissions to Turnitin, current and archived Web pages, periodicals, journals, and publications. Additionally, your document will become part of the Turnitin database.

General Conduct & Behavior

Students are also expected to maintain and abide by the highest standards of professional conduct and behavior. Please familiarize yourself with Stern's Policy in Regard to In-Class Behavior & Expectations (http://www.stern.nyu.edu/portal-partners/current-students/undergraduate/resources-policies/academic-policies/index.htm) and the NYU Student Conduct Policy (https://www.nyu.edu/about/policies-guidelines-compliance/policies-and-guidelines/university-student-conduct-policy.html).

STUDENT ACCESSIBILITY

If you will require academic accommodation of any kind during this course, you must notify me at the beginning of the course and provide a letter from the Moses Center for Student Accessibility (212-998-4980, mosescsa@nyu.edu) verifying your registration and outlining the accommodations they recommend. If you will need to take an exam at the Moses Center for Student Accessibility, you must submit a completed Exam Accommodations Form to them at least one week prior to the scheduled exam time to

be guaranteed accommodation. For more information, visit the CSA website: https://www.nyu.edu/students/communities-and-groups/student-accessibility.html