

Georgia Institute of Technology

Scheller College of Business

MGT4074 – Fintech & Crypto Tokens

Fall 2026 (Aug 24th – Dec 8th)

Tentative Syllabus

Updated May 1, 2026. All details are subject to alteration as the course proceeds.

Instructor: Pauline Liang
Email: yliang429@gatech.edu
Class Times: MW 9:30am–10:45am (Section A), 2:00pm–3:15pm (Section B)
Classroom: Scheller College of Business – Room 4167
Office Hours: TBD

1 Course Description and Objectives

Digital innovation is disrupting financial functions such as lending, payments, asset management, and retail banking. The market capitalization of cryptocurrencies such as Bitcoin and Ether is cumulatively in the trillions of dollars and rising. In MGT4074, we will strip down the modern financial services industry into its simplest moving parts using the tools of economic theory and by reading relevant history, demonstrating how both the regulation of and technologies underlying modern finance came to be. Then, we will show how recent innovations in cryptography and information technology have enabled new ways to solve old problems in financial services. This class will take a first principles approach wherever possible to not just teach the nature of financial technology and crypto, but the primitive concepts that govern the demand for financial services and the pain points presented by existing financial technologies.

This class will cover the history of financial technology, the development of financial regulation and the traditional financial system (“tradfi”), cryptocurrency, smart contracts, and the decentralized financial system (“defi”), as well as selected topics in Fintech. The bulk of your grade will be earned in two handwritten midterm exams and one final project. A choice of formats will be offered for the final project – you may either research and present an analytical mini-thesis or program and present a smart contract. You will leave this class with a foundational understanding of what technological facts have shaped the development of the traditional financial system and its regulation, the low-level details of how cryptocurrencies work and what problems they have (and have not) solved in finance, and where the cutting edge of financial technology is located in the year 2026.

2 Enrollment Requirement

Prerequisite(s): Management 3062 (Financial Management) or Management 3078 (Finance & Investments) with D or better.

3 Instruction Method

The course is taught in person only at the scheduled time and place. Frequent pop quizzes will be given without advance warning at the start of class time, and no make-up opportunities will be given. Pop quizzes and midterm exams will be taken by hand and in person. I will cold-call students by asking questions without warning to ensure everyone is paying constant attention. Please also silence your ringers before class.

3.1 Study Groups

I strongly encourage all students to form study groups to regularly review the class materials and quiz each other in preparation for pop quizzes and exams. You are welcome to form study groups on your own. I will also distribute a poll early in the semester where students may indicate their scheduling availability. If you would like help finding a group, I will assign students to study groups based on overlapping availability.

4 Course Materials

4.1 Required Readings

All required readings will be posted on Canvas. They will include news articles, short essays, and academic papers. Short readings will be made available at least 2 days before I will quiz you on them. Longer readings will be made available at least 5 days before I will quiz you on them. I will make clear the due date for each reading when it is posted.

4.2 Lecture Slides

Lecture slides will be posted on Canvas. The slides are your best resource for studying for exams. The answers to the exams and pop quizzes will come directly from the lecture slides and from the required readings. The exams and pop quizzes are closed-book, so you will need to commit the information from the slides and readings to memory.

4.3 Canvas

All course announcements will be posted on Canvas: please check Canvas regularly. On a regular basis, I will also send emails to the entire class about logistical matters, such as reminders of deadlines. Please check your email regularly.

4.4 Suggested Textbooks

There is no required textbook for this class, but some students prefer to have an extensive source for reference and background reading. There are two excellent textbooks that will enhance your understanding of this subject:

- Narayanan, Arvind, Joseph Bonneau, Edward Felten, Andrew Miller, and Steven Goldfeder (2016), *Bitcoin and Cryptocurrency Technologies: A Comprehensive Introduction*. Princeton University Press.
- Di Maggio, Marco (2025), *Blockchain, Crypto, and DeFi: Bridging Finance and Technology*. Wiley.

5 Grading Policy

There is no curve by default. You are collaborators, not competitors. Your numerical grade is the sum of the points earned in each category of evaluation:

Category	Points
Homework	20
Quizzes	10
Midterms ($\times 2$)	40
Final Project	30
Class Participation	5
Total	105

Your numerical grade (rounded to the nearest whole number up to 105) will then be converted to a letter grade according to the following schedule:

Letter Grade	Percent Grade
A	$90 \leq \text{grade}$
B	$80 \leq \text{grade} < 90$
C	$70 \leq \text{grade} < 80$
D	$60 \leq \text{grade} < 70$
F	$\text{grade} < 60$

Canvas may automatically calculate some kind of weighted grade for you – please ignore it. Your grade in this class is calculated by this rubric alone.

5.1 Homework

Homework assignments will be posted on Canvas periodically and discussed in class. All assignments will be available for at least 7 days before they are due. All completed assignments must be submitted through Canvas.

5.2 Quizzes

Quizzes will be given at the beginning of class at my discretion without pre-announcement or warning. They will cover slides from past classes and any readings that I may from time to time announce in class and on Canvas as “required”. Quizzes will be closed-book and handwritten in person. Your lowest quiz score of the semester will be dropped.

5.3 Exams

Two midterm exams will be given according to the class schedule contained in this document. Exams will be closed-book and handwritten in person. The format of the exams will be a combination of multiple-choice and short response. The exams are designed to be completed in fewer than 60 minutes, but all 75 minutes of class time are available for you to complete the exams. The first exam is given very early in the semester so that you may accurately diagnose the effectiveness of your study habits and respond accordingly. Exams are not cumulative – the second exam will include only that material which is covered after the first exam. There is no final exam.

5.4 Class Participation

The university attendance policies are detailed here: <http://catalog.gatech.edu/rules/4/> and here: <https://registrar.gatech.edu/faculty-and-staff/institute-approved-absences>. You may not request an institute-approved absence retroactively. I will take attendance starting the second week of class. Up to 5 out of 105 points of your final grade can be earned through attendance and class participation.

6 Final Project

More details about the final project will be revealed after the second midterm. You may choose to defend a mini-thesis or to create a smart contract. There will be an option of working in groups or individually.

7 Academic Rules and Policies

7.1 Academic Honor Code

It is your responsibility to familiarize yourself with the Georgia Tech Academic Honor Code ([link](#)). I am required to report any possible honor code violation to the Office of Student Integrity.

7.2 Accommodations for Disabilities

If you have established accommodations with the Offices of Disability Services, please communicate your approved accommodations to me at your earliest convenience so we can discuss your needs in this course. Any accommodations granted will begin after you present the documentation. Accommodations for a specific event will be considered after the request but before the event. No retroactive accommodations will be made. If you have a need but have not yet established accommodations through Disability Services, you should contact Disability Services at 404.894.2563 or dsinfo@gatech.edu or <http://disabilityservices.gatech.edu>. Disability Services offers resources and coordinates reasonable accommodations for students with disabilities and/or temporary health conditions. Reasonable accommodations are established through an interactive process between you, your instructor(s) and Disability Services. Should a new disability be identified during

the term, the instructor will work with Disability Services to accommodate your needs from that time forward.

8 Support Services and Resources

In your time at Georgia Tech, you may find yourself in need of support. Below, you will find some resources to support you both as a student and as a person.

8.1 Academic Support

Center for Academic Success

- 1-to-1 tutoring: <http://success.gatech.edu/1-1-tutoring>
- Peer-Led Undergraduate Study (PLUS): <http://success.gatech.edu/tutoring/plus>
- Academic coaching: <http://success.gatech.edu/coaching>
- More: <http://success.gatech.edu>

Residence Life's Learning Assistance Program

- Drop-in tutoring for many 1000 level courses
- More: <https://housing.gatech.edu/learning-assistance-program>

Office of Minority Educational Development: Educational Services

- Group study sessions and tutoring programs
- More: <http://omed.gatech.edu/programs/academic-support>

Communication Center

- Individualized help with writing and multimedia projects
- More: <http://www.communicationcenter.gatech.edu>

Undergraduate Advising and Transition

- Academic Coaching
- More: <https://advising.gatech.edu/>

8.2 Personal Support

The Office of the Dean of Students

- link: <http://studentlife.gatech.edu/content/services>
- Phone: 404-894-6367
- Location: Smithgall Student Services Building 2nd floor
- More: <http://success.gatech.edu>

Counseling Center

- link: <http://counseling.gatech.edu>
- Phone: 404-894-2575
- Location: Smithgall Student Services Building 2nd floor
- Services include short-term individual counseling, group counseling, couples counseling, testing and assessment, referral services, and crisis intervention. Their website also includes links to state and national resources.
- Students in crisis may walk in during business hours (8am–5pm, Monday through Friday) or contact the counselor on call after hours at 404-894-2204.

Students' Temporary Assistance and Resources (STAR)

- link: <http://studentlife.gatech.edu/content/need-help>
- Can assist with interview, clothing, food, and housing needs

Stamps Health Services

- link: <https://health.gatech.edu>
- Phone: 404-894-1420
- Primary care, pharmacy, women's health, psychiatry, immunization and allergy, health promotion, and nutrition

Undergraduate Advising and Transition

- Academic Coaching
- More: <https://advising.gatech.edu/>

More Resource and Help Centers

- Women's Resource Center: <http://www.womenscenter.gatech.edu>
- LGBTQIA Resource Center: <http://lgbtqia.gatech.edu/>
- Veteran's Resource Center: <http://veterans.gatech.edu/>
- Georgia Tech Police: 404-894-2500

9 Tentative Course Outline

All details are subject to alteration at my discretion as the course proceeds.

Date	Topic
Part I History of Fintech and Tradfi	
M Aug 24th	The History of Fintech I
W Aug 26th	The History of Fintech II
M Aug 31th	The History of Fintech III
W Sep 2nd	The Traditional Finance Industry I
M Sep 7th	Labor Day – No Class
W Sep 9th	The Traditional Finance Industry II
M Sep 14th	Midterm Exam I
Part II Cryptocurrency and Defi	
W Sep 16th	Bitcoin, Blockchain, and Cryptocurrencies I
M Sep 21st	Bitcoin, Blockchain, and Cryptocurrencies II
W Sep 23rd	Bitcoin, Blockchain, and Cryptocurrencies III
M Sep 28th	Smart Contracts and Ethereum I
W Sep 30th	Smart Contracts and Ethereum II
M Oct 5th	Fall Break – No Class
W Oct 7th	Fungible and Non-Fungible Tokens I
M Oct 12th	Fungible and Non-Fungible Tokens II
W Oct 14th	Decentralized Finance I
M Oct 19th	Decentralized Finance II
W Oct 21st	Midterm Exam II
Part III Selected Topics in Fintech	
M Oct 26th	Risks, Frauds, and Government Regulation I
W Oct 28th	Risks, Frauds, and Government Regulation II
M Nov 2nd	Payment Systems I
W Nov 4th	Payment Systems II
M Nov 9th	Large Language Models in Finance I
W Nov 11th	Large Language Models In Finance II
M Nov 16th	Final Project Presentations I
W Nov 18th	Final Project Presentations II
M Nov 23rd	Final Project Presentations III
W Nov 25th	Student Recess – No Class
M Nov 30th	Final Project Presentations IV or Frontiers in FinTech Research
W Dec 2nd	Frontiers in FinTech Research
M Dec 7th	Frontiers in FinTech Research

There is no Final Exam.

All scheduling details are tentative and subject to change.