

Digital Currency, Blockchains, and the Future of the Financial Services Industry

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KMC 1-70, 44 West 4th Street
Mondays & Wednesdays, 10:30 –11:50
Spring 2026

Course overview

Bloomberg in 2016 summarized a research report issued by McKinsey & Co:

Firing people won't be enough to save the world's biggest banks from technological and regulatory changes that have reshaped the industry - whole businesses must go, according to McKinsey & Co. Almost every bank will have to quash aspirations to be all things to all customers . . . Only three to five global full-service banks will survive, McKinsey said.

In 2020, Goldman Sachs appointed a new Head of Digital Assets, who told CNBC in an interview that:

In the next five to 10 years, you could see a financial system where all assets and liabilities are native to a blockchain, with all transactions natively happening on-chain.

This course covers digital currencies, blockchains, and related topics in the FinTech area, perhaps the most significant innovation in the financial world since the advent of double-entry bookkeeping centuries ago. The technology appears to represent an existential challenge for major parts of the finance industry. It is now commonly suggested by experts such as McKinsey that commercial banks and stock exchanges may no longer exist, or may become much smaller, within the next 10 to 20 years, with increasing volumes of payments and exchange taking place on a decentralized, peer to peer basis.

We will begin with a study of the nature of money and legacy payment and banking systems. We will then study the emergence of stateless, cloud-based digital currency systems since 2009. Further lectures will explore threats that blockchain technology poses to incumbent firms and their resulting attempts to co-opt the technology into existing business models. We survey related topics including “smart contracts” and decentralized finance (DeFi), stablecoins, central bank digital currency (CBDC), and emerging regulation such as the 2025 GENIUS Act in the United States.

Learning Outcomes: The goal of this course is to equip the students to better understand the law and business of blockchain technology, both in its initial application in the digital currency Bitcoin, as well as in the wide variety of emergent digital assets and

applications currently being explored for a wide variety of uses and functions. The course is also intended to create a bridge between law students and business students that will enhance the quality of their communications after they enter into their careers.

Course organization

The course meets twice a week, Mondays and Wednesdays from 10:30–11:50. The Stern School and Law School have somewhat different academic calendars. We will generally follow the Stern calendar, since our classroom is located there. Our first class meeting will be Monday, January 26, and our final class meeting will be Monday, May 4. We will not hold class on Monday, February 16, which is a holiday at both schools, and we will not have a “legislative Monday” on Tuesday, February 17. Class does not meet March 16 & 18, the week of spring break for both schools. All class meetings will be recorded for later viewing, with links available on the NYU Brightspace website via MediaSite (note that we do not use PanOpto, the Law School’s media platform, which is similar to MediaSite in many respects).

The course will feature a number of guest speakers, and we may need to adjust the class schedule to accommodate their travel constraints.

Readings

Many readings for the course will be posted in .pdf or .ppt format on NYU Brightspace, or will be available through Internet links included in the syllabus below. The syllabus may be updated several times during the semester to reflect the availability of new readings or guest speakers.

We will also feature reading excerpts from two textbooks:

- Narayanan et al., *Bitcoin and Cryptocurrency Technologies* (2016). This book, a companion to Princeton University’s Coursera open on-line course in digital currency, is available for purchase, but a full pre-publication draft [can be downloaded at no cost](#).
- Carnell, Macey & Miller, *The Law of Financial Institutions* (6th edition, 2017). Excerpts will be distributed to students via NYU Brightspace.

For further reading:

- Students are encouraged to stay current on the topic by following recent developments. For relevant daily breaking news, the authoritative source is the website [Coindesk](#).
- A concise, non-technical and highly readable introduction to the field is Malekan, *The Story of the Blockchain* (2018).

- Another succinct book, written at the intermediate-level book and more focused on Ethereum and decentralized finance is Harvey, Ramachandran and Santoro, *DeFi and the Future of Finance* (2021).

Evaluation

Evaluation will be based 90% on student papers or projects that will be due during the May exam period, and 10% on the “student participation” short writing assignments described below. Potential paper topics will be distributed early in the semester, although students are encouraged to propose their own subjects.

Student Participation

Each student shall turn in a 1 to 2-page essay analyzing or discussing a topic that was presented in class or addressed in the readings assigned during the prior month. The essay shall identify an issue or question that remains unsolved, or inadequately explored or resolved, and explain why that issue is important or impactful. The essay should be written in 12 point font, double-spaced, with standard margins and should include citations as necessary to the lecture, class assigned reading, and any other sources. All essays shall be submitted by 5:00 pm Eastern time on the below dates via NYU Brightspace in .docx or .pdf format. These essays will be graded on a pass/fail basis and will account for 10% of the student grade. *Essay due dates:* February 27, March 27, and April 24.

Lecture topics

An approximate list of the course’s lecture topics appears below. We may deviate from this schedule based upon factors including the pace of individual lectures and the availability of guest speakers, and events that occur in industry. Additional readings may be supplied and posted on NYU Brightspace when they become available.

Monday, January 26 GM/MR/DY Introductory class

- *The Economist*, 2015, “The Great Chain of Being Sure About Things.”
- [Ferguson, 2020, “Bitcoin Is Winning the COVID-19 Monetary Revolution.”](#)
- *The Economist*, 2021, special report on The Future of Banking.

Wednesday, January 28 GM The nature of money

- Carnell, Macey & Miller (19-21; 31-40; 199-204).

Monday, February 2 GM Payment systems

- Narayanan et al, Preface pp 3-22.
- Carnell, Macey & Miller (50-56; 65-78).

Wednesday, February 4 GM Bank failures

- Carnell, Macey & Miller (238-249; 260-267) .

Monday, February 9 DY The road to Bitcoin
Wednesday, February 11

- Nakamoto, 2008, "[Bitcoin: A Peer-to-Peer Electronic Cash System.](#)"
- [Segal, 2014, "Eagle Scout. Idealist. Drug Trafficker?"](#)
- Narayanan, et al. Preface, pp 3-22.
- *Optional:* For a possible narrative of the mysterious circumstances surrounding the creation of Bitcoin, visit <http://vu.hn/bitcoin%20origins.html> and see the discussion at <https://blockspain.ricmac.org/2018/02/15/satoshi-nakamoto-scronty/>

Wednesday, February 18 DY Blockchains and mining
Monday, February 23

- Narayanan, et al. Ch. 1.
- Haber & Stornetta, 1991, "[How to Time-Stamp a Digital Document.](#)"
- Böhme, Christin, Edelman, and Moore, 2015, "[Bitcoin: Economics, Technology, and Governance.](#)"
- Huang, O'Neill, & Tabuchi, 2021, "[Bitcoin Uses More Electricity Than Many Countries. How Is That Possible?](#)"

Wednesday, February 25 DY Forks, attacks, and "code=law"

- Narayanan, et al. Ch. 5
- Kiernan, 2023, "[Bitcoin's Future Depends on a Handful of Mysterious Coders.](#)"

Monday, March 2 DY Altcoins and tokens;
ERC-20 ICOs and ERC-721 NFTs

- Howell, Niessner, & Yermack, 2020, "[Initial Coin Offerings: Financing Growth with Cryptocurrency Token Sales.](#)"
- Chow, 2021, "[NFTs Are Shaking Up the Art World—But They Could Change So Much More.](#)"
- Upson, 2021, "[The 10,000 Faces That Launched an NFT Revolution.](#)"

- Wednesday, March 4 MR Securities regulation and crypto
- Henderson & Raskin, 2019, “[A Regulatory Classification of Digital Assets: Toward an Operational *Howey* Test for Cryptocurrencies, ICOs, and Other Digital Assets.](#)”
 - Garlinghouse, 2020, “[The SEC’s Attack on Crypto in the United States.](#)”
 - [SEC v. Ripple Labs](#), case no. 20 Civ. 10832 (S.D.N.Y., July 13, 2023)
 - Donald Trump, [Speech at Libertarian Party National Convention](#) (transcript) (2024)
 - [Congressional Research Service Report on H.R. 3633](#), the CLARITY Act (2025)
 - [Congressional Research Service Report on S. 1582](#) GENIUS Act (2025)
- Monday, March 9 MR Civil litigation and crypto assets
- Raskin, 2015, “[Realm of the Coin: Bitcoin and Civil Procedure.](#)”
- Wednesday, March 11 DY Crypto’s impact on investing
- Le & Campbell, 2025, “[Crypto and the Evolution of the Capital Markets](#)”
 - Livsey & Stafford, 2025, “[Investors Pile into Tokenised Treasury Funds.](#)”
 - Pantera Capital, 2025, “[The Great Onchain Migration.](#)”
 - Kaiko, 2025, “[Perps Are Coming to America.](#)”
- Monday, March 23 MR Criminal litigation and crypto assets
- [SEC v. Shavers](#), case no. 4:13-CV-416 (E.D. Tex. Aug. 6, 2013)
 - [U.S. v. Faiella](#), 39 F. Supp. 3d 544 (S.D.N.Y. 2014)
 - [U.S. v. Ulbricht sentencing transcript](#) (S.D.N.Y. 2015) (pp. 63-98)
 - [Van Loon v. Department of the Treasury](#), No. 23-50669 (5th Cir. 2024)
 - (Optional) Bilton, 2022, “[The Ballad of Razzlekhan and Dutch, Bitcoin’s Bonnie and Clyde.](#)”
 - [Ending Regulation by Prosecution](#), dated April 7, 2025 (“Blanche Memo”)
- Wednesday, March 25 GM Stablecoins, past and present
- Carnell, Macey & Miller (204-238).

Monday, March 30 GM Regulation of stablecoins

- Bank for International Settlements, 2025, “[Stablecoin Growth – Policy Challenges and Approaches.](#)”
- Bank Policy Institute, 2025, “[Closing the Payment of Interest Loophole for Stablecoins.](#)”
- DLA Piper, 2025, “[EU Crypto-Assets Regulatory Framework: Application of the Landmark Markets in Crypto Assets Regulation \(MiCA\).](#)”
- Paul Weiss, 2025, “[GENIUS Act Ushers in Comprehensive Federal Regulation of Payment Stablecoins.](#)”
- PWC, 2025, “[Global Crypto Regulation Report.](#)”
- Sidley Austin, 2025, “[The GENIUS Act: A Framework for U.S. Stablecoin Issuance.](#)”
- [State Financial Regulators Letter to Congress on the GENIUS Act](#)
- [American Bankers Association Letter to Congress on the GENIUS Act](#)
- [Fact Sheet: President Donald J. Trump Signs the GENIUS Act into Law](#)

Wednesday, April 1 [GM]

Guest speaker: **Paul Grewal**
Chief Legal Officer, Coinbase

Monday, April 6 DY Private and social media stablecoins

- Brunnermeier, James, & Landau, 2019, “[The Digitalization of Money.](#)”
- Tett, 2021, “[Bankers Quietly Mould Crypto Innovations for Their Own Use.](#)”
- Kowsmann, Ostroff & Wexler, 2024, “[Crypto Gets Blamed for a Real-Life Currency Crisis.](#)”
- Berwick & Foldy, 2024, “[Inside the Russian Shadow Trade for Weapons Parts, Fueled by Crypto.](#)”
- Berwick, Foldy, Strasburg & Brown, 2024, “[Howard Lutnick’s Other Top Client: Crypto Giant Tether.](#)”
- Elder, 2025, “[Stablecoins Might Revolutionise Payments, but What if They Don’t?](#)”

Wednesday, April 8 [GM]

Guest speaker: **Heath Tarbert**
President, Circle

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| Monday, April 13 | [GM] | |
| <i>Guest speaker:</i> | Peter van Valkenburgh | Executive Director, Coin Center |
| Wednesday, April 15 | [DY] | |
| <i>Guest speaker:</i> | Juan Suarez | Founder of Crypto Ratings Council
Former Deputy General Counsel, Coinbase |
| Monday, April 20 | MR | Smart contracts |
| | | <ul style="list-style-type: none"> • Narayanan et al., Ch. 9. • Szabo, 1996, “Formalizing and Securing Relationships on Public Networks.” • Chamber of Digital Commerce, 2016, “Smart Contracts – 12 Use Cases for Business & Beyond.” • Raskin, 2017, “The Law and Legality of Smart Contracts.” • (Optional) Raskin & Millman, 2023 “An Introduction to Personal Growth Bets: Using Contract Law to Lose Weight and Quit Smoking.” |
| Wednesday, April 22 | DY | Decentralized finance (DeFi) |
| | | <ul style="list-style-type: none"> • <i>The Economist</i>, 2021, special report on Decentralized Finance. • Schär, 2021, “On Blockchain- and Smart Contract-Based Financial Markets.” • Lehar & Parlour, 2025, “Decentralized Exchange: The Uniswap Automated Market Maker.” |
| Monday, April 27 | DY | Ethereum and proof of stake |
| | | <ul style="list-style-type: none"> • Leisig, 2017, “The Ether Thief.” • CoinMetrics, 2022, “Mapping Out the Merge.” |
| Wednesday, April 29 | DY | DeFi controversies and the emergence of Ethereum competitors |
| | | <ul style="list-style-type: none"> • Wahrstätter, Zhou, Qin, Sventinovic and Gervais, 2023, “Time to Bribe: Measuring Block Construction Markets.” |

Monday, May 4

DY

Financial inclusion and
Central bank digital currency

- [Dyson & Hodgson, 2016, “Digital Cash: Why Central Banks Should Start Issuing Electronic Money.”](#)
- Raskin & Epstein, 2023, “[A Wall of Separation Between Money and State: Policy and Philosophy for the Era of Cryptocurrency.](#)”
- CBDC Tracker: <https://cbdctracker.org/>
- Atlantic Council: <https://www.atlanticcouncil.org/cbdctracker/>