

Law, Money, & Technology: Policy and Practice in the 21st Century

Willamette University College of Law
Fall 2021

Professor Rohan Grey
Email: rgrey@willamette.edu
Office: Room 426
Virtual Office: meet.rohangrey.net/office
Phone: 347.721.4224
Coursechat: [@rohangrey:chat.rohangrey.net](https://chat.rohangrey.net)

COURSE DESCRIPTION

Our lives are shaped by money and technology, which in turn are constituted and mediated by law. In particular, innovations in monetary and financial technology, or ‘fintech,’ tend to drive technological change more broadly. This has been true since [the invention of the written word as an accounting device over 5000 years ago](#), at least. Today, Wall St and Silicon Valley dominate our social and political imagination. No one, from private individuals to businesses to political leaders, can escape the disruptive effects of information capitalism and the internet.

Against this backdrop, legal debates over the design and regulation of digital currencies serve as a microcosm for larger political debates regarding the appropriate balance of public and private power, freedom and control, and privacy and surveillance in the twenty-first century. In a very real sense, the future of digital money is the future of the global economy. Lawyers have a critical role to play in shaping this future – as architects, counselors, problem-solvers, entrepreneurs, activists, and social visionaries. More immediately, how you as law students perceive and relate to money and digital technology can and will have a profound impact on the kind of lawyer you will ultimately become.

To that end, this course will consist of three components. First, you will read and discuss texts and hear from experts to better understand the relationship between law, money, and technology, using various forms of digital money as case studies. Second, you will complete a set of practical exercises to learn how to better incorporate digital technology into your legal practice. These include, but are not limited to, setting up a personal website, email, and self-hosted cloud, and experimenting with free and open-source office and communications platforms. Third, you will complete an individual research or applied learning project on a related topic of your choosing, and present your results to the class.

This course is open to upper-level students of all backgrounds. No prior knowledge or technical skill is assumed or required. If you have ever wanted to learn more about finance and/or digital technology, but didn’t know where to start, I encourage you to take this course.

LEARNING OBJECTIVES

Students in this course will explore and critically evaluate:

1. the relationship between law and political economy, including the ways in which legal reasoning reflects prevailing material conditions;

2. the legal and technological foundations of monetary and financial systems;
3. the ways in which information and communication technologies shape, and are shaped by, law and political economy;
4. legal and policy issues relating to the design and regulation of digital money; and
5. the role of money and technology in their personal and professional lives.

Students in this course will also learn how to:

1. identify and analyze legal, financial, and technological problems pertaining to a particular object, industry, or institution;
2. conduct independent research and present the results of that research in an appropriate written format; and
3. install, maintain, and troubleshoot issues relating to digital technologies commonly used in professional legal and business contexts, including but not limited to:
 - a) server hardware and web hosting;
 - b) domain names and basic websites;
 - d) cloud storage and virtual private networking;
 - e) messaging, email, and videoconferencing platforms; and
 - f) research, writing, and office productivity.

AVAILABILITY

Office hours are virtual, and by appointment. To attend, go to meet.rohangrey.net/office via any browser. You may also contact me at any time via email or, preferably, via [Coursechat](#) (see below).

ACCOMMODATIONS

Pledge of Support: Law school is hard enough at the best of times, and these are not the best of times. It is my responsibility to provide support and make myself available to you in whatever ways are most helpful to you. I will do my utmost to honor that responsibility, and hope that you will hold me accountable if I fail to do so.

Accessibility: Willamette maintains an office of services for students with disabilities. The Accessible Education Services Director can be reached at 503-370-6471. Students who have a disability that may require auxiliary services should make an appointment with the Accessible Education Services Director to learn about eligibility and available services as soon as possible, preferably by the beginning of the semester.

FORMAT

Enrollment: Enrollment in this course is capped at 19 students.

Eligibility: This course is open to students of all backgrounds. No prior knowledge or technical expertise is assumed or required.

Class: This course will use a ‘flipped classroom’ approach.¹ You will watch recorded lectures and complete assigned readings, practical exercises, and writing assignments before class. Class time will be devoted to reflective discussion, collaborative problem-solving, and engagement with guest experts.

Individual Project: Outside of class, you will complete an individual research or applied learning project on a topic of your choosing related to one or more themes explored in the course (subject to instructor approval). You will give a mid-semester presentation on your project and provide feedback on your classmates’ projects. At the end of the semester, you will submit a written capstone of 10-15 double-spaced pages based on your project, which can take the form of a creative, analytical, or argumentative essay, reflection, legal memo, or report.

ASSESSMENT

Evaluation: Your performance in this course will be assessed holistically on the basis of your individual project and overall course participation, including (but not limited to) completion of readings, written assignments, and practical exercises, and contributions made in class, during office hours, and on [Courseweb](#) and [Coursechat](#).

TECHNOLOGY

In keeping with my [technology policy](#), I prefer to use privacy-respecting, [free software](#) platforms in my teaching as well as professional practice. In particular, we will use three platforms for asynchronous learning: [Courseweb](#), a documentation platform based on the same wiki engine used by [Wikipedia](#); [Coursechat](#), a decentralized messaging platform designed for project-based collaboration; and [Etherpad](#), a cloud-based collaborative note-taking platform.

LEARNING RESOURCES

Textbook: There is no required textbook for this course. Curated reading packets and recorded lectures will be posted to [Courseweb](#) before each class.

Experts: We will have a number of guest experts join the class to share their insights on relevant topics.

ATTENDANCE & CONDUCT

You are expected to attend all classes unless excused in advance. If you cannot make class due to an unforeseen emergency, I expect you to let me know as soon as practically possible. As a courtesy, please also reply in a timely fashion to any emails that indicate a response is required.

¹ In accordance with ABA requirements, it is expected that students should spend an average of at least 3 hours outside of class reading, reviewing, outlining, studying, or otherwise working on the material for every hour of class time.

Good lawyers conduct themselves with integrity, and treat their colleagues and clients with respect. I expect no less from you in my class. In particular, please be considerate towards your fellow students and use their indicated name, title, and pronouns.

I do not mind whether you choose to call me “Professor Grey,” “Professor,” or “Rohan.” However, I recognize that my ambivalence about being addressed formally is a [function of my privilege](#), and that institutional norms in favor of the use of proper titles for professors are an important bulwark against the disrespect and discrimination that academics from underrepresented backgrounds often face. Accordingly, please use the title “Professor” when referring other members of faculty.

PRELIMINARY SCHEDULE

Session A

Session B

Week 1

Lecture 1A: The Law, Money, Technology Nexus

Lecture 1B: Information, Records, & Accounting

Reading Packet 1A

1. Philip Pilkington (2011), What is Debt? An Interview With Economic Anthropologist David Graeber, *Naked Capitalism*
2. Denise Schmandt-Besserat (2014), *The Evolution of Writing*
3. William Goetzmann (2016), Chapter 2, *Money Changes Everything: How Finance Made Civilization Possible*
4. Christine Desan (2008), From Blood to Profit: The Transformation of Value in the American Constitutional Tradition, *Journal of Policy History*

Practical Exercises

1. Pre-Course Survey (*LimeSurvey*)
2. Courseweb (*MediaWiki*)
3. Coursechat (*Element/Matrix*)

Reading Packet 1B

1. Eben Moglen (2007), Why Free Beer Isn't So Good If Your Data Are Getting Drunk: How Free as in Freedom Businesses Help Prevent the Ultimate Privacy Catastrophe, *Keynote at 2007 MySQL Conference*
2. Michael Hudson (2004), The Role of Accounting in Civilization's Economic Takeoff, in Hudson & Wunsch (eds.), *Creating Economic Order: Record-Keeping, Standardization, and the Development of Accounting in the Ancient Near East*
3. Willard J. Graham (1938), Law and Accounting, *North Carolina Law Review*
4. Blair Fix (2019), The Aggregation Problem: Implications for Ecological and Biophysical Economics, *BioPhysical Economics and Resource Quality*

Writing Assignment: Reflection #1

Week 2

Lecture 2A: Law & Code

Lecture 2B: Capitalism and the Law

Reading Packet 2A

1. Lawrence Lessig (2006), Chapter 1, *Code: Version 2.0*
2. Eben Moglen (2000), When Code Isn't Law, *Free Software Matters*
3. Eben Moglen (1999), Anarchism Triumphant: Free Software and the Death of Copyright, *First Mondays*
4. Gabriella Coleman (2013), Chapter 4, *Coding Freedom: The Ethics and Aesthetics of Hacking*

Practical Exercises

1. Browsing (*Firefox/Adblocker*)
2. Video Calls (*Jitsi*)
3. Web Conferencing (*BigBlueButton*)

Reading Packet 2B

1. David Grewal (2014), The Laws of Capitalism, *Harvard Law Review*
2. Katharina Pistor (2019), Chapter 1, *The Code of Capital: How the Law Creates Wealth and Inequality*
3. Simon Deakin et al (2014), Legal Institutionalism: Capitalism and the Constitutive Role of Law, *Journal of Comparative Economics*
4. Barbara Fried (2001), Chapter 4, *The Progressive Assault on Laissez Faire: Robert Hale and the First Law and Economics Movement*
5. K-Sue Park (2020), *This Land Is Our Land*

Writing Assignment: Reflection #2

Week 3

Lecture 3A: Money

Reading Packet 3A

1. Christine Desan (2016), Money as a Legal Institution, in Fox & Ernst (eds.), *Money in the Western Legal Tradition: Middle Ages to Bretton Woods*
2. David Fox (2016), The Case of Mixt Monies: Confirming Nominalism in the Common Law of Monetary Obligations, in Fox & Ernst (eds.), *Money in the Western Legal Tradition: Middle Ages to Bretton Woods*
3. Nina Banelj, Frederick Wherry, & Viviana Zelizer (2017), Introduction, *Money Talks: Explaining How Money Really Works*
4. Rohan Grey, Administering Money: Coinage, Debt Crises, and the Future of Fiscal Policy, *Kentucky Law Review*

Practical Exercises

1. Office Suite (LibreOffice)
2. Collaborative Editing (Etherpad)
3. Bibliography (Zotero/Juris-M)

Lecture 3B: Credit

Reading Packet 3B

1. Alfred Mitchell-Innes (1914), What is Credit?, *Banking Law Journal*
2. K-Sue Park (2016), Money, Mortgages, and the Conquest of America, *Law and Social Inquiry*
3. Katharina Pistor (2013), The Legal Theory of Finance, *Journal of Comparative Economics*
4. Michael McLeay, Amar Radia, & Ryland Thomas (2014), Money Creation in the Modern Economy, *Bank of England*

Writing Assignment: Reflection #3

Week 4

Lecture 4A: Banking

Reading Packet 4A

1. Benjamin Geva (2016), ‘Bank Money’: The Rise, Fall, and Metamorphosis of the ‘Transferable Deposit’, in Fox & Ernst (eds.), *Money in the Western Legal Tradition: Middle Ages to Bretton Woods*
2. Robert Hockett & Saule Omarova (2016), “Special,” Vestigial, or Visionary? What Bank Regulation Tells Us About the Corporation – And Vice Versa, *Seattle University Law Review*
3. Shane White (2014), Freedom’s First Con: African Americans and Changing Notes in Antebellum New York City, *Journal of the Early Republic*
4. Robert Hockett & Saule Omarova (2017), The Finance Franchise, *Cornell Law Review*

Practical Exercises

1. Domain Name (Gandi)
2. Virtual Private Server (DigitalOcean)

Lecture 4B: Shadow Finance

Reading Packet 4B

1. L. Randall Wray (2013), What Do Banks Do? What Should Banks Do? A Minskian Perspective, *Accounting, Economics, and Law: A Convivium*
2. Zoltan Poszar (2014), Shadow Banking: The Money View, *Office of Financial Research, U.S. Treasury*
3. Daniela Gabor & Jakob Vestergaard (2016), Towards a Theory of Shadow Money, *Institute for New Economic Thinking*
4. Morgan Ricks (2016), Entry Restriction, Shadow Banking, and the Structure of Monetary Institutions, *Journal of Financial Regulation*

Writing Assignment: Reflection #4

Week 5

Lecture 5A: Collateral

Reading Packet 5A

1. Annalise Riles (2010), Collateral Expertise: Legal Knowledge in the Global Financial Markets, *Current Anthropology*
2. Rohan Grey (2019), Banking in a Digital Fiat

Lecture 5B: Liquidity

Reading Packet 5B

1. Perry Mehrling (2010), Chapter 1 & 3, *The New Lombard Street: How the Fed Became the Dealer of Last Resort*
2. Anastasia Nesvetailova (2010), The Crisis of Invented Money: Liquidity Illusion and the Global Credit Meltdown,

Currency Regime, in Philipp Hacker et al (eds.), *Regulating Blockchain: Techno-Social and Legal Challenges*

3. Saule Omarova (2020), The People's Ledger: How to Democratize Money and Finance the Economy, *Cornell Legal Studies Research Paper*
4. William Black (2010), *Testimony Before the Financial Crisis Inquiry Commission, September 21*

Practical Exercises

1. Email (Roundcube/Thunderbird)
2. WebServer (Nginx/Apache)

Week 6

Lecture 6A: Payments

Reading Packet 6A

1. Doug Arner, Janos Barberis, & Ross Buckley (2015), The Evolution of Fintech: A New Post-Crisis Paradigm?, *Georgetown Journal of International Law*
2. Joseph Sommer (2008), Where is the Economic Analysis of Payment Law?, *Chicago-Kent Law Review*
3. Dan Awrey & Kristin van Zwieten (2018), The Shadow Payment System, *Journal of Corporation Law*
4. Hilary Allen (2020), Payments Failure, *Boston College Law Review*

Practical Exercises

1. Cloud (Nextcloud)
2. Virtual Private Network (OpenVPN/Wireguard)

Week 7

--- Student Project Proposals ---

Week 8

Lecture 7A: Electrification & Digitization

Reading Packet 7A

1. Joseph Sommer, (1998), Against Cyberlaw, *Berkeley Technology Law Journal*
2. Richard Du Boff (1980), Business Demand and the Development of the Telegraph in the United States, 1844-1860, *Business History Review*
3. Susan Scott & Markos Zachariadis (2010), Origins and Development of SWIFT, 1973-2009, *Business History*
3. Lana Swartz (2014), Gendered Transactions: Identity and Payment at Midcentury, *Women's Studies Quarterly*

Theoretical Inquiries in Law

3. Perry Mehrling (2016), Elasticity and Discipline in the Global Swap Network, *International Journal of Political Economy*
4. Colleen Baker (2013), The Federal Reserve's Use of International Swap Lines, *Arizona Law Review*

Writing Assignment: Reflection #5

Lecture 6B: Automation

Reading Packet 6B

1. Virginia Eubanks (2018), Chapter 1, *Automating Inequality: How High-Tech Tools Profile, Police, and Punish the Poor*
2. Martha Poon (2016), Corporate Capitalism and the Growing Power of Big Data, *Science, Technology, and Human Values*
3. James Grimmelman (2019), All Smart Contracts Are Ambiguous, *Journal of Law & Innovation*
4. Saule Omarova (2019), New Tech v. New Deal: Fintech as a Systemic Phenomenon, *Yale Journal on Regulation*
5. Frank Pasquale (2020), Finance Chapter, *The New Laws of Robotics*

Writing Assignment: Reflection #6

--- Student Project Proposals ---

Lecture 7B: Information Capitalism

Reading Packet 7B

1. Winifred Gallagher (2017), Introduction & Chapter 1, *How the Post Office Created America*
2. Yochai Benkler (2006), Chapter 1, *The Wealth of Networks: How Social Production Transforms Markets and Freedom*
3. Michael Goldhaber (1997), The Attention Economy and the Net, *First Mondays*
4. Amy Kapczynski, (2020), The Law of Informational Capitalism, *Yale Law Journal*

Guest Expert

1. Amy Kapczynski, Yale Law School, or
2. Julie Cohen, Georgetown Law School

Written Reflection #7

Week 9

Lecture 8A: eMoney

Reading Packet 8A

1. Michael Geist (1998), The Reality of Bytes: Regulating Economic Activity in the Age of the Internet, *Washington Law Review*
2. Danielle Kehl, Andi Wilson, & Kevin Bankston (2015), Doomed To Repeat History? Lessons From the Crypto Wars of the 1990s, *New America*
3. Lawrence Trautman (2016), E-Commerce, Cyber, and Electronic Payment System Risks: Lessons From Paypal, *U.C. Davis Business Law Journal*
4. Izabella Kaminska (2015), Is It a Bank, A Money Transmitter, or a Silicon Valley Shadow Financier? No, It's Just Paypal!, *Financial Times Alphaville Blog*

Lecture 8B: Mobile Money

Reading Packet 8B

1. Sunduzwayo Madise (2019), Chapter 2, *The Regulation of Mobile Money*
2. Bruce Maurer (2012), Mobile Money: Communication, Consumption and Change in the Payments Space, *Journal of Development Studies*
3. Kevin Donovan & Emma Park (2019), Perpetual Debt in the Silicon Savannah, *Boston Review*
4. Ross Buckley, Jonathan Greenacre, & Louise Malady (2015), The Regulation of Mobile Money in Malawi, *Washington University Global Studies Law Review*

Guest Expert

1. Hilary Allen, American University Law, or
2. Jonathan Greenacre, Boston University (Pardee)

Written Reflection #8

Week 10

Lecture 9A: Cryptocurrency I

Reading Packet 9A

1. Aaron van Wirdum (2018), The Genesis Files: How David Chaum's eCash Spawned a Cypherpunk Dream, *Bitcoin Magazine*
2. Sarah Jeong (2013), The Bitcoin Protocol as Law, and the Politics of a Stateless Currency, *SSRN*
3. Angela Walch (2017), The Path of the Blockchain Lexicon (and the Law), *Review of Banking & Payment Law*
4. Jake Goldenfein & Andrea Leiter (2018), Legal Engineering on the Blockchain: 'Smart Contracts' as Legal Conduct

Lecture 9B: Cryptocurrency II

Reading Packet 9B

1. Angela Walch (2019), Deconstructing 'Decentralization': Exploring the Core Claims of Crypto Systems, in Christopher Brummer (ed.), *Cryptoassets: Legal, Regulatory, and Monetary Perspectives*
2. Stephen Palley (2016), How To Sue A Decentralized Autonomous Organization, *Coindesk*
3. Angela Walch (2015), The Bitcoin Blockchain as Financial Market Infrastructure: A Consideration of Operational Risk, *NYU Journal of Legislation and Public Policy*
4. Dan Awrey, Lev Menand, & James McAndrews (2020), Warning of the Dangers Posed By the Shadow Payment System and Shadow Digital Money, *Comment Letter to the Office of the Comptroller of the Currency*

Guest Expert

1. Angela Walch, St. Mary's Law, or
2. Stephen Palley Esq., Anderson Kill P.C.

Written Reflection #9

Week 11

Lecture 10A: Stablecoins

Reading Packet 10A

1. Douglas Arner (2020), Stablecoins: Risks, Potential and Regulation, *Bank of International Settlements*
2. Tim Swanson (2021), Parasitic 'Stablecoins',

Lecture 10B: Central Bank Digital Currency

Reading Packet 10B

1. Morten Bech & Rodney Garratt (2017), Central Bank Cryptocurrencies, *Bank of International Settlements*
2. Morgan Ricks, Lev Menand, & John Crawford (2020), Fed Accounts: Digital Dollars, *George Washington Law*

Great Wall of Numbers

3. Raul Carrillo (2020), Banking on Surveillance: The Libra Black Paper, *Americans for Financial Reform & Demand Progress*

4. Jeff Benson (2020), Crypto’s New Villain: Meet the Legal Scholar Behind the STABLE Act, *Decrypt*

Review

3. Mehrsa Baradaran (2014), It’s Time For Postal Banking, *Harvard Law Review*

4. Jonathan Dharmapalan & Rohan Grey (2017), The Macroeconomic Policy Implications of Digital Fiat Currency, *eCurrency Mint*

Guest Expert

1. Saule Omarova, Cornell Law School, or
2. Jonathan Dharmapalan, eCurrency Mint, Ltd.

Written Reflection #10

Week 12

Lecture 11A: eCash

Reading Packet 11A

1. Brett Scott (2016), The War on Cash, *The Long+Short*

2. Jerry Brito (2019), The Case for Electronic Cash, *Coin Center*

3. James Rogers (2005), The New Old Law of Electronic Money, *SMU Law Review*

4. David Beckworth (2019), The Future of Digital Fiat Currency, *MacroMusings*

Lecture 11B: Law, Money, Technology, and the Future

Reading Packet 11B

1. Frank Pasquale (2020), Chapter 1, *New Laws of Robotics: Defending Human Expertise in the Age of AI*

2. Eben Moglen (2012), Why Freedom of Thought Requires Free Media, and Why Free Media Requires Free Software, *Keynote at Re:Publica Conference*

3. Tamara Nopper (2020), Alternative Data and the Future of Credit Scoring, *Data For Progress*

4. Rohan Grey (2019), Monetary Resilience, *Western New England Law Review*

Guest Expert

1. Raul Carrillo, Yale Law School, or
2. Chastity Murphy, Economic Policy Advisor to Rep. Rashida Tlaib (D-Mi)

Written Reflection #11

Week 13

--- Student Project Presentations ---

--- Student Project Proposals ---