Indiana University Robert H. McKinney School of Law

Blockchain and Digital Currency Law (3 cr)

Spring 2024

by Professor Dr. Frank Emmert, LL.M., FCIArb
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Class Meetings: Wednesdays 10.15 am to 1.10 pm in LR 375

Office Hours: Wednesdays after class or by appointment

Course Description:

This is a new full-semester course, to be delivered in person in one session per week for 3 credit hours during the Spring of 2024. The course was taught at IU Maurer in Spring 2022 and has been updated with a new textbook and various recent developments. Due to the dynamics of crypto markets, additional handouts and updates will be provided as needed.

In 2009, Bitcoin was the first digital asset released as cryptographically secured computer code running as a blockchain on a decentralized ledger (DLT). Its supporters see it as an alternative to fiat money controlled by national central banks. Although opportunities to make actual payments with Bitcoin – or any other crypto currencies – for goods and services of everyday life remain limited, more than 10,000 alternative digital coins and tokens have emerged since 2009.

Over the years, the value of a single Bitcoin has gone from a fraction of a penny to more than US$60,000 but has also shown extreme volatility. The entire market, at the peak, had a capitalization of some US$3 trillion. On 6 December 2023, all publicly traded crypto currencies were valued at around US$1.7 Trillion, the Bitcoin market share was 51%, and the 24 hour trading volume amounted to US$107 Billion. These numbers are significant and explain keen interest on behalf of regulators, investors, speculators, developers, and the public at large.

Similar to pieces of art, the value of most digital assets is entirely determined by the value assigned to it by the marketplace, i.e. the willingness of sellers and buyers to make transactions of a commodity that is in limited supply. However, some digital assets are actually tied to real-world assets like the U.S. Dollar or gold, and some are cryptographically stabilized. These "stable coins" have distinct use cases beyond speculative investment.

Proponents of digital currencies value the decentralized and self-governed nature, as well as the high speed and low cost of transactions, including international transactions. Critics warn of the risks to users and investors caused by the high levels of volatility, the potential for tax evasion, money laundering, and payments for illegal purposes, the susceptibility of user wallets and exchanges to hackers, and the environmental impact of certain types of validation (mining). Regulators around the world have been struggling with the provision of regulatory frameworks that facilitate experimentation with and lawful use of digital currencies while preventing unconscionable risk, abuse and fraud.

The course will first explain the technology and provide examples of use cases. Subsequently, the course will compare the approach taken so far by U.S. federal agencies with legislative and regulatory approaches taken in a number of the several States, as well as several international jurisdictions, and analyze the rights and obligations of various stakeholders in different parts of the world. In the final sessions, the course participants will consider better approaches for regulation of the industry and options for international harmonization of rules.

Reading Materials and Other Resources:

- Required reading: Carol Goforth & Yuliya Guseva: Regulation of Cryptoassets, West Academic, 2nd ed. 2022
- Some publications by Prof. Emmert available on ResearchGate: https://www.researchgate.net/profile/Frank-Emmert
- Additional handouts, video clips, blog posts, etc.

Teaching and Learning Methods:

From the beginning, the course will be taught in a combination of lecture and discussion, including Socratic dialogue, presupposing extensive preparation by the students with the help of the assigned reading and other materials. In class, the focus will be on a critical analysis of the legal rules and their application to real life cases, and the effects of incoherent and potentially contradictory rules in different jurisdictions.

Learning Outcomes and Objectives:

At the end of the course, students will be prepared to render advice to developers of blockchain-based applications, issuers of digital assets and trading platforms for digital currencies, as well as investors and buyers of coins and tokens, about the regulatory framework in different jurisdictions, and the rights and obligations of the different actors and stakeholders. At the same time, students will be qualified to advise regulators and policy makers in different settings (legislative and executive authorities, including treasuries, central banks, tax authorities, and specialized regulatory authorities like the Commodity Futures Trading Commission (CFTC), or the Securities and Exchange Commission (SEC), etc.) about goals to pursue and tools to employ in the quest for a safe and transparent marketplace for digital assets that balances the need to foster financial and technological innovation.

More generally:

- Students will demonstrate the ability to understand statutory and case material at the State, Federal and international level, and will analyze the regulatory challenges posed by the rapidly developing field of blockchain technology.
- Students will demonstrate the ability to resolve complex problems by applying fundamental principles and rules and present persuasive reasoning and analysis of their answers.
- Students will use opportunities to demonstrate their learning through extensive class discussion and presentations.
- Students will develop critical thinking skills and foster deeper understanding of the technical and legal challenges inherent in this newly developing field of study and how this informs their work with private clients.
- Through class discussion and analysis of current events, including issues regarding blockchain companies and different forms of regulation in the U.S. and other countries, students will learn how to approach and potentially resolve regulatory challenges in the real world.

Learning Assessment:

The final exam will be a 24 hour take home exam providing a real-life case scenario and asking for a partisan attorney brief or a draft decision by a judicial clerk or a piece of draft regulation. The final will count for 50% of the overall grade. In addition, there will be 2 (announced) open-book quizzes, which will count for 20% each, and an oral participation component of 10%. The main purpose of the quizzes is to give students early feedback about their performance and to motivate them to study continuously for this course. Towards the end, there will also be a mock exam, which students complete on their own and which will be discussed in class, in order to give students an idea of what to expect on the final.

Students will have the opportunity of making short presentations in weeks 4 and 9 to improve their quiz- or oral scores.

Credit Hours, Workload, and Attendance:

The course consists of 13 weeks and meets for 150 minutes per week (3 hours minus breaks) for a total of 1,950 minutes. Students will be working for at least 300 minutes on the final exam for a total of 2,250 minutes, matching the required 750 x 3 credits = 2,250 minutes. In addition, students are expected to spend an average of 240 minutes per week on class preparation (50 pp. average reading per week), review of the class sessions, and preparation for the quizzes and final exam.

As with all courses at the law school, attendance is mandatory and will be taken in every session. Attendance is defined as arrival at or before class time and presence until the end of class time with the exception of breaks announced by the instructor. Late arrival or early departure can be treated as failure to attend, in particular in repeated cases. However, reasonable accommodations for religious holidays or family events may be agreed upon in advance with the instructor.

Course Content:

Week 1: Introduction to the Course & the History of Blockchain Technology

– Cryptography, bit gold, and the birth of secured chains in the 1990s
– The strengths and weaknesses of fiat money
– Satoshi Nakamoto's Whitepaper and the birth of Bitcoin
– Distributed ledgers, private and public keys, wallets, exchanges, mining
– Buying and selling crypto
– Smart Contracts
– ICOs and the 2017 AltCoin Boom and Crash
☞ Textbook Chapter 1: Introduction to Cryptoassets, the Blockchain Revolution, and Regulatory Response
☞ Textbook Chapter 17: Crypto-Speak: Understanding the Language of Cryptoassets
☞ Emmert, SMART MONEY FOR THE PEOPLE: USING FINANCIAL INNOVATION AND TECHNOLOGY TO PROMOTE ESG, forthcoming in Duke Law & Technology Review (final draft will be made available via ResearchGate)

Week 2: Silk Road, Mt. Gox, and Ripple

– United States v. Ulbricht, the Silk Road Case
– Mt. Gox case study
– Ripple case study

☞ Textbook Chapter 3: Silk Road and Its Impact on Crypto
☞ Mabrouk, BEYOND SPECULATION: THE TRANSFORMATIVE POWER OF BLOCKCHAIN TECHNOLOGY IN VARIOUS INDUSTRIES, forthcoming in European Journal of Law Reform 2023

Week 3: Crypto and the Regulators I – Crypto as Securities in the Eyes of the SEC
– The Howey Test
– When is a cryptocurrency a security and when is it not?
– Registration of crypto as securities
– Enforcement powers of the SEC
☞ Textbook Chapter 6: Crypto, Securities Regulation and the SEC
☞ Textbook Chapter 7: Is Crypto a Security?

Week 4: Illegal and Unclear Activities and the Response of the SEC
– The problem of fraud in crypto activities
– Unregistered sales
– The extraterritorial reach of the SEC
– SEC v. Kik Interactive
– SEC v. Telegram
– SEC v. Ripple Labs
– The DAO
– SEC v. Impact Theory (NFTs)
– SEC v. celebrities promoting crypto on social media
– Other cases
Some students will be assigned an SEC decision and present it in a 5 minute oral presentation and a 1-2 page written summary
☞ Textbook Chapter 8: Fraud and the SEC
☞ Textbook Chapter 9: The SEC and Unregistered, Nonexempt Transactions and Exchanges
☞ Tapia, DAO REGULATION AND LEGISLATION, forthcoming in European Journal of Law Reform 2023
☞ Britton, NON-FUNGIBLE TOKENS (NFTS) – THE REGULATORY RESPONSE AND THE CURRENT AND FUTURE LEGAL STATUS, forthcoming in European Journal of Law Reform 2023

Week 5: Crypto and the Regulators II – FinCEN
– The mission of FinCEN
– Legal and illegal uses of blockchain technology as seen by FinCEN
– KYC and AML requirements
– and how they are being circumvented
☞ Textbook Chapter 2: Crypto and the Regulators – FinCEN
☞ Textbook Chapter 4: FinCEN, Crypto Exchanges, and Money Transmitters

Week 6: FinCEN in 2024

– FinCEN's application of BSA requirements in the evolving crypto market
– Extraterritorial application of U.S. rules and regulations
– Where do we go from here?
☞ Textbook Chapter 5: FinCEN's Evolving Response to Cryptoassets

Week 7: Crypto and the Regulators III – the CFTC

– The mission of the CFTC compared to the SEC
– Crypto as commodity
– Crypto derivatives
– Fraud in crypto spot markets
– The extraterritorial reach of the CFTC
☞ Textbook Chapter 10: Crypto and the Regulators – the CFTC
☞ Textbook Chapter 11: The CFTC and Crypto as Commodity

Week 8: Crypto and the Regulators IV – Other Federal Agencies

– The DoJ
– The FTC
– The CFPB
– The FDIC
– The Fed
– The Office of Foreign Assets Control (OFAC) at the Treasury Department
– Case Studies: Binance, Tornado Cash
– The Financial Oversight Council (FSOC)
☞ Textbook Chapter 12: Other Regulators in the Crypto Ecosystem

Week 9: Crypto and the Regulators V – the 50 States

– Article 12 and other reforms of the UCC
– New York's BitLicense, and the current CRPTO Bill
– Wyoming's DAO legislation
– CBDC and Anti-CBDC laws in Florida, North Carolina
– and everyone else in between

Some students will be assigned a specific State approach and present it in a 5 minute oral presentation and a 1-2 page written summary

☞ Textbook Chapter 14: Regulation of Crypto at the State Level
☞ Emmert, THE REGULATION OF CRYPTOCURRENCIES IN THE UNITED STATES OF AMERICA, forthcoming in European Journal of Law Reform 2023
☞ additional handouts

Week 10: Crypto and the Regulators VI – International and Foreign Regulation of Crypto

– International law and its impact in the U.S.
– International law and policy interests raised by crypto
– Crypto regulation in the EU: The MiCA Regulation
☞ Textbook Chapter 15: International Regulation of Crypto

- ☞ EU Regulation 2023/1114 on Markets in Crypto Assets (MiCA), OJ 2023 L 150, pp. 40-205
- ☞ van Oosten & Hillen, MICA: THE INTRODUCTION OF AN EU-WIDE REGULATORY FRAMEWORK FOR CRYPTO-ASSETS, forthcoming in European Journal of Law Reform 2023
- ☞ additional handouts

Week 11: Taxation of Crypto
- The IRS and crypto, including the proposed IRS broker rule
- Airdrops
- Mining
- Income or capital gains?
- Enforcement problems
- State and local taxes
- ☞ Textbook Chapter 16: Taxation of Crypto

Week 12: The Latest Developments in the Crypto Ecosystem I
- NFTs
- Stablecoins
- CBDCs
- ETFs, ETPs, and indirect investment
- ☞ Textbook Chapter 13: Ongoing Developments in the Crypto Ecosystem
- ☞ additional handouts
- ☞ distribution of mock exam

Week 13: The Latest Developments in the Crypto Ecosystem II & Review of Mock Exam & General Review
- DeFI and Web3
- Review of mock exam
- General Q & A

Friday, April 19 to Friday, May 3: Final Exam
any 24 hours during the entire exam period, in coordination with the Office of the Ass. Dean for Student Affairs