## 1. General Information

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|---|---|
| Course Subject | FINA |
| Course Number | 3386 |
| Course Title | Digital Assets |
| Academic Years | 2024-2025 |
| Grading Method | Letter |

## 2. Instructors

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## 4. Course Description

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|---|---|
| Course Description | This course is taught by finance industry practitioners and aims to cover financial application, business use cases of infrastructure and applications of distributed ledger technology; various forms of digital assets including stablecoins, security token, cryptocurrencies and smart contracts technology and applications will be discussed. The course is designed for business and finance students focusing on its application in business and in investments. Students will learn and research on how regulated TradFi participants in blockchain and crypto native operate respectively in brokerage, asset management, venture capital investment, structured products and exchange operations. Students will also be briefed on the latest regulatory framework.<br><br>Fintech entrepreneurs and veteran industry leaders will be invited as guest speakers to share their insight on the latest industry developments. |
| Prerequisites | FINA2320: Investments and Portfolio Analysis |

## 5. Course Objectives

1. The course aims to provide students with a practical understanding of how blockchain technology is applied in practical business use and monetization for asset owners, exchanges, brokers, asset managers and service providers. Students shall become informed about market structure, investment landscape, consumer preference and product variety with various types of digital asset market players. The course hopes to help students understand and integrate how use of blockchain technology enables various type of financial ecosystems and business opportunities.

While the course is primarily designed to prepare students in finance and investment, students who are interested in technology and financial engineering will also benefit from the course.

## 6. Faculty Learning Goals

Goal 1: Acquisition and internalization of knowledge of the programme discipline

Goal 2: Application and integration of knowledge

Goal 3: Inculcating professionalism

Goal 4: Developing global outlook

Goal 5: Mastering communication skills

Goal 6: Cultivating leadership

## 7. Course Learning Outcomes

| Course Teaching and Learning Activities | Aligned Faculty Learning Goals | | | | | |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 |
| CLO1. Understand global landscape in digital asset markets including regulations and regulators' interests as well as participant backgrounds and business motives. | ✔ | | ✔ | ✔ | | |
| CLO2. Understand differentiation in business value proposition, interconnectivity, as well as roles and responsibilities of various types of digital asset business players and learn about the latest regulatory framework and developments. | ✔ | | ✔ | ✔ | | |
| CLO3. Evaluate and validate considerations and issues of various types of unregulated and regulated financial products. | | ✔ | ✔ | ✔ | ✔ | |
| CLO4. Master basic knowledge in distributed ledger technology on both infrastructure and application levels. | ✔ | | ✔ | ✔ | | |
| CLO5. Evaluate pros and cons in progressive, unregulated innovation vs. regulations and social interest | | ✔ | ✔ | ✔ | ✔ | |
| CLO6. Master communication skills and cultivating leadership through group projects and presentation | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ |

## 8. Course Teaching and Learning Activities

| Course Teaching and Learning Activities # | Expected Study Hours | Study Load (% of study) |
|---|---|---|
| T&L1. Lectures and Guest Lectures | 33 | 24.8 |
| T&L2. Reading and preparation | 30 | 22.6 |
| T&L3. Project preparation | 50 | 37.6 |
| T&L4. Assignments | 20 | 15 |
| | Total: 133 | Total: 100 |

## 9. Assessment Methods

| Assessment Methods | Description | Weight % | Aligned Course Learning Outcomes |
|---|---|---|---|
| A1. Class Participation | Students are expected to actively participate in the classroom discussions | 20% | 1,2,3,4,5,6 |
| A2. Assignments | Students are expected to complete assignments including short quizzes and homework on financial market related matters such as market structure, participants, monetization opportunity and rules and regulations. | 40% | 1,2,3,4,5 |
| A3. Case Study | Students are expected to complete a group project with teammates. Students should demonstrate independent thinking, analytical abilities, and research skills in mainstream or controversial topics in distributed ledger technology as well as its financial market applications. | 40% | 1,2,3,4,5,6 |

## 10. Course Grade Descriptors

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|---|---|
| A+,A,A- | Demonstrate superior ability to fulfill learning outcomes and make strong contributions in class and group activities |
| B+,B,B- | Demonstrate strong ability to fulfil learning outcomes, apply the knowledge effectively and make solid contributions in class and group activities |
| C+,C,C- | Make adequate contributions in class and group activities, and demonstrate mastery of the subject, but show gaps in understanding, or inconsistent application of the learning outcomes to practical examples |
| D+,D | Demonstrate evidence of familiarity with ESG topics, and effort to contribute in class or group activities |
| F | Demonstrate limited evidence of basic familiarity with the subject and limited effort to contribute to class or group activities |

## 11. Course Content and Tentative Teaching Schedule

| Topic/ Session | Content |
|---|---|
| 1 | The landscape, participants, and background of digital assets |
| 2 | The regulations and jurisdictional aspects of digital assets. |
| 3 | Asset Management – private equity, venture capital and hedge fund - buy-side developments |
| 4 | Entrepreneurs/ founders' angle of developing the ecosystem |
| 5 | How does FinTech /TechFin and relevant industries coincide & develop in the next phrase of Digital world |
| 6 | DeFi: what's behind the scenes |
| 7 | CeFi: Regulated and unregulated market structure and products |
| 8 | Web 3 Trading - OTC vs listed, spot vs. derivatives |
| 9 | What's a token in scientific terms? Is it different from a centralized digital record? |
| 10 | Token economy - Security token, CBDC, Stablecoin, crypto, and NFT |

## 12. Required/Recommended Readings & Online Materials

| Reading | |
|---|---|
| | https://chain.link/whitepaper |
| | https://chain.link/case-studies |
| | https://chain.link/techtalks |
| | https://www.coinbase.com/learn |
| | https://academy.binance.com/en |
| | https://www.rba.gov.au/education/resources/explainers/cryptocurrencies.html |
| | https://www.pwchk.com/en/research-and-insights.html |
| | https://www.pwchk.com/en/services/audit-and-assurance/risk-assurance/crypto-services.html |
| | https://www.jpmorgan.com/onyx/content-hub.htm |
| | https://www.bis.org/about/bisih/topics/cbdc/mcbdc_bridge.htm |
| | https://www.bis.org/about/bisih/publ.htm?m=269 |
| | https://www.goldmansachs.com/intelligence/topics/future-of-digital-assets.html |
| | https://www.blackrock.com/us/financial-professionals/investment-strategies/bitcoin-investing |
| | https://www.cmegroup.com/education/courses/introduction-to-bitcoin.html |

**Optional**

1. Mastering Blockchain: A deep dive into distributed ledgers, consensus protocols, smart contracts, DApps, cryptocurrencies, Ethereum, and more, 3rd Edition; Imran Bashir
2. Distributed Ledgers: Design and Regulation of Financial Infrastructure and Payment Systems; Robert M. Townsend (ISBN electronic: 9780262361194)
3. Bitcoin, Blockchain, and Cryptoassets: A Comprehensive Introduction; Fabian Schär and Aleksander Berentsen (ISBN: 9780262539166)

## 13. Means / Processes for Student feedback on Course

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|---|---|
| | Conducting mid-term survey in additional to SETL around the end of the semester |
| | Online response via Moodle site |
| | Others |

## 14. Course Policy

As per university standard policies.

Class Conduct:  Respect for different opinions is an essential element of this course.

## 15. Additional Course Information

Students are expected to complete reading materials before classes and actively participate in class discussion. Attendance is of top importance in grading. Students will be graded on his or her active contribution in class.

Special projects will be assigned to student groups to assess their independent learning skills and fundamental research skills. Students are expected to demonstrate competency in teamwork effort, submission punctuation and independent thinking.

Assessment rubrics for assignments and case study are the same as in course grade descriptors.