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**Course: Law**

**Degree: Bachelor**

**Branch: Core curriculum**

**Study plan: Aviso n.º 9088/2019, de 23 de maio**

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**Teaching staff:**

**Professor in charge of the curricular unit**

Mestre Martinho de Almeida Garrett Lucas Pires

**Other Professors of the curricular unit**

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**Language of instruction:**

English

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**Functioning:**

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**Intended learning outcomes:**

The purpose of this seminar is to present and discuss the main legal challenges posed by the economic and social adoption of distributed ledger technologies (DLTs), mostly known as “blockchains”. The seminar intends to frame the relationship between law and DLTs within the broader dogmatic framework of legal theory and technological regulation, and to assess the legal implications of blockchains by looking at (i) its characteristics and fundamental principles; (ii) social and economic eco-system; and (iii) major use-cases. The objective of the seminar is for participants to have, by the end of the course, an understanding of what DLTs are, how they function and for what end, and to be able to identify and critically reflect upon the main current and prospective legal issues raised by the technology and its innovative structures.

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**Syllabus:**

This course discusses, from an analytical and critical perspective, the history, technique, function and purpose of DLTs, including innovations associated with DLTs such as crypto-assets and smart contracts. It describes the crypto-community and the crypto-market and compares its philosophy and ideology against traditional legacy actors (banks, financial institutions, etc). The course also provides insights into the new international regulations concerning DLTs and crypto-assets, particularly legal instruments adopted in the USA and in the EU in terms of financial instruments law.

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**Evidence of the syllabus coherence with the curricular units intended learning outcomes:**

The program focuses on providing a basic introduction to the technology and to its main legal problems, coming from financial and monetary laws. In this way, students shall be able to understand the features of the technology and the

main legal challenges that its adoption currently faces, as well as being able to critically consider future developments and have the tools for more in depth and future research.

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**Recommended prior learning (or curricular units whose prior attendance is recommended):**

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**Teaching and assessment methods:**

The teaching method is based on class-participation. Students must read before each session the notes previously provided for on Moodle, together with an assignment concerning the subject of each session. Such notes may consist of readings or videos. In the end of the course students shall be requested to do a written exam with two essay questions concerning the topics discussed during the course. Final assessment consists of class-participation grade (30%) and the result of the exam (70%).

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**Evidence of the teaching methods and the intended learning outcomes:**

To provide better understanding of the subject, and considering its highly technical nature, this course follows a more practical approach focused on making students learn about the economic uses of the subject at stake. Consistency comes from providing practical and critical discussions on the problems generated by DLT adoption, that challenge traditional notions of transactions, money, and investment. In this way students can have a better understanding at how the technology works and the impact it brings, as well as the legal problems that it creates.

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**Bibliography:**

- FINCK, Michèle, “Blockchains: Regulating the Unknown”, in German Law Journal, Vol. 19, n.º 4, 2018
- NAKAMOTO, Satoshi, Bitcoin: A Peer-to-Peer Electronic Cash System, 2008, available in <https://bitcoin.org/bitcoin.pdf>
- RAUCH et al, “Distributed Ledger Technologies: A Conceptual Framework” Cambridge Center for Alternative Finance Report August 2018.
- DE FILLIPI, Primavera e LOVELUCK, Benjamin, “The Invisible Politics of Bitcoin: Governance Crisis of a Decentralised Infrastructure” Internet Policy Review, Volume 5, n.º 3
- BODÓ, Balázs e GIANNOPOULOU, Alexandra, “The Logics of Technology Decentralization - The Case of Distributed Ledger Technologies” Amsterdam Law School Research Paper No. 2019-05, February 2019, available in <https://ssrn.com/abstract=3330590>
- WALCH, Angela, “Deconstructing ‘Decentralization’: Exploring the Core Claim of Crypto Systems” January 30, 2019, available at: <https://ssrn.com/abstract=3326244>
- HM TREASURY, FCA AND BANK OF ENGLAND, “Crypto-assets Taskforce: Final Report”, October 2018 - EBA, “Report with advice for the European Commission on crypto-assets” January 2019
- SZABO, Nick, “The Idea of Smart Contracts” 1997, available at <https://nakamotoinstitute.org/the-idea-of-smart-contracts/>

- DE FILLIPI, Primavera and MCMULLEN, Gregg, "Governance of blockchain systems: Governance of and by Distributed Infrastructure" Blockchain Research Institute and COALA, 2018.
- YEUNG, Karen, "Regulation by Blockchain: the Emerging Battle for Supremacy between the Code of Law and Code as Law" The Modern Law Review Volume 82, no. 2, 2019.

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**Legislation:**

- Directive 2009/110/EC, E-Money Directive
- Directive 2014/65/EU, Markets in Financial Instruments Directive
- Proposal for a Council and Parliament Regulation on the Market in Crypto-Assets (European Commission, 2020)
- Infrastructure Bill Amendments (US Senate and Congress, 2021)
- SEC v. Howey Co., 328 U.S. 293 (1946)
- Skatteverket v David Hedqvist CJEU 2015.

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**Lesson's Plan:**

The program consists of eight sessions. The first session concerns the thematic, methodological and conceptual introduction to the course. The second session concerns the discussion of what are DLTs from a technical and functional perspective. The third session discusses the innovations brought by DLTs: crypto-assets and smart contracts. The fourth session looks at the crypto-market and its eco-system. The fifth session critically discusses the main innovation of blockchain: technological decentralization. The sixth session discusses DLTs and crypto-assets as legal phenomenon. The seven session concerns a critical look at the main legislation regarding DLTs and crypto-assets. The eight session is a written exam with two essay questions for students to answer regarding the subjects taught during the course.