

DISCIPLINA: LEGAL FOUNDATIONS OF NEW TECHNOLOGIES	CÓDIGO: GRDDIRATCE0396
PROFESSOR: HELEN EENMAA-DIMITRIEVA	CARGA HORÁRIA: 10h
EMENTA <ul style="list-style-type: none"> • Distributed ledger technology - including blockchain. • E-governance technologies - including ID-cards, e-voting, e-residency, data embassies and machine-readable law. • Legal technologies - including the use of artificial intelligence. 	
OBJETIVOS GERAIS The purpose of the course is to provide a systematic and comprehensive analysis of a number of new technologies in governance and finance around the world, discussing their fundamental technical features as well as the main constitutional dilemmas that we face in using these technologies.	
OBJETIVOS ESPECÍFICOS Students are expected to develop the ability to understand the main elements and legal concepts of information technology, the technical and legal preconditions of a variety of new technologies in governance and finance, as well as the main constitutional dilemmas in the field of information technology law.	
BIBLIOGRAFIA OBRIGATÓRIA Mandatory reading will be determined before each class.	
BIBLIOGRAFIA COMPLEMENTAR Distributed ledger technology, including blockchain: <ul style="list-style-type: none"> • <i>Distributed Ledger Technology: beyond block chain</i>. A report by the UK Government Chief Scientific Adviser. Crown Copyright 2016, Available at: <https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/492972/g-s-16-1-distributed-ledger-technology.pdf> • Wright, A., De Filippi, P. <i>Decentralized Blockchain Technology and the Rise of Lex Cryptographia</i> (March 10, 2015). Abstract. Available at <http://ssrn.com/abstract=2580664> • Reyes, Carla L., <i>Moving Beyond Bitcoin to an Endogenous Theory of Decentralized Ledger Technology Regulation: An Initial Proposal (April 18, 2016)</i>. Villanova Law Review, Vol. 61, No. 1, 2016; Stetson University College of Law Research Paper no. 2016-8. Available at <http://ssrn.com/abstract=2766705> • Nakamoto, S. (2008) '<i>Bitcoin: A peer-to-peer electronic cash system</i>', Consulted, 1(2012): 1– 28. Available at https://bitcoin.org/bitcoin.pdf (original document describing Bitcoin) • Buterin, V. DAOs, DACs, DAs and More. <i>An Incomplete Terminology Guide</i>. 6th March 2014. Available at: <https://blog.ethereum.org/2014/05/06/daos-dacs-das-and-more-anincomplete-terminology-guide/> E-governance technologies, including ID-cards, e-voting, e-residency, data embassies, machinereadable law: <ul style="list-style-type: none"> • <i>World Development Report 2016: Digital Dividends</i>. Available at: <http://www.worldbank.org/en/publication/wdr2016> 	

- Kotka, T. and Liiv, I. *Concept of Estonian Government Cloud and Data Embassies. Electronic Government and the Information Systems Perspective*. Volume 9265 of the series Lecture Notes in Computer Science, pp 149-162. Available at <http://link.springer.com/chapter/10.1007/978-3-319-22389-6_11 (If access is limited, please request a pdf version from the lecturer.)>
- Implementation of the Virtual Data Embassy Solution. Summary Report of the Research Project on Public Cloud Usage for Government, Conducted by Estonian Ministry of Economic Affairs and Communications and Microsoft Corporation. Available at <https://www.mkm.ee/sites/default/files/implementation_of_the_virtual_data_embassy_solution_summary_report.pdf>

Legal technologies, including the use of artificial intelligence:

- Lewis-Kraus, G. *The Great A.I. Awakening*, *New York Times Magazine*. Available at <<http://nyti.ms/2hE6XZ5>>
- Ambrogi, R. *The 10 Most Important Legal Technology Developments of 2016*. Available at <<http://www.lawsitesblog.com/2016/12/10-important-legal-technology-developments2016.html>> (please also see the materials under the links in the article)

More:

- Various articles at <<https://cyber.harvard.edu/>>

Various articles at <<http://cyberlaw.stanford.edu/publications/academic>>