



The Leon Recanati Graduate School of Business Administration

## 1231.3948.01 – Blockchain Technologies, United Nations, Impact

### חדשנות בלוקצ'יין ויעדי הקיימות של האו"ם

#### Second Semester – 2023

Section	Day	Hour	Exam date	Lecturer	Email	Telephone
01	Monday	15:45-18:30 (Second half)	No exams	Dr. Inon Schenker	inons@tauex.tau.ac.il	

Teaching Assistant (TA): TBC

Office Hours: By appointment)

#### תקציר בעברית על אודות הקורס:

טכנולוגיות בלוקצ'יין מתגלות כפורצות-דרך, משנות סדרי-עולם ומרובות פנים והן כבר משפיעות על חברות ואנשים ברחבי העולם. נכיר יוזמות גלובליות לשימוש בטכנולוגיה פורצת דרך זו במאבק ב-COVID-19 ובקידום 17 היעדים לפיתוח בר-קיימא (SDGs), אשר מנחים את מדינות העולם עד 2030. יעדים אלה ואבני הדרך המדידות שלהם ייבחנו בהקשר של ניהול מהלכים גלובליים. נרחיב את היכרותנו עם ארגוני האומות המאוחדות – אחד המעסיקים הגדולים בעולם, יכולותיהם ומגבלותיהם בהבאת ערך מוסף.

הקורס פתוח לכלל הסטודנטים לתואר שני באוניברסיטת תל אביב: ניהול, מדעי החברה והרוח, רפואה, מדעי החיים והסביבה, משפטים, מדעי המחשב וגם אומנות. נתמקד במפגש שבין טכנולוגיות Blockchain לתהליכים חברתיים עכשוויים, דיפלומטיה, פעילות הומניטרית ואימפקט.

שלושה צירים מרכזיים בקורס: א. טכנולוגיות בלוקצ'יין (כולל מטבעות קריפטוגרפיים) ב. השפעה משמעותית (IMPACT) ג. האומות המאוחדות.

לא נדרש ידע מוקדם בתחום. הסטודנטים יהיו שותפים פעילים בלמידה, יפגשו מרצים אורחים מהעולם ויחשפו לחזית ההתפתחות הטכנולוגית בבלוקצ'יין.

### Course Units

1 course unit = 4 ECTS units

The ECTS (European Credit Transfer and Accumulation System) is a framework defined by the European Commission to allow for unified recognition of student academic achievements from different countries.

## Course Description

Blockchain technologies are proving to be groundbreaking, game-changers and multifaceted and are already affecting companies and individuals around the world.

We shall explore and critic initiatives to use Blockchain technologies in the fight against 19-COVID and the advancement of the 17 United Nations Sustainable Development Goals (SDGs), which guide the global development agenda until 2030.

There are three main pillars for the course: a. Blockchain technologies (including cryptocurrencies) b. (Social) Impact c. the United Nations.

Students will be active partners in learning, meet guest lecturers from around the world and be exposed to the forefront of the technological advancement of Blockchain. Interested students will find added value in the course as an eye opener for UN jobs.

The course is open to all graduate students at Tel Aviv University: Management, Social Sciences and Humanities, Medicine, Life and Environmental Sciences, Law, Computer Science and Art. We will learn on the junctions between Blockchain Technologies and contemporary social processes, diplomacy, humanitarian efforts and impact.

**The course does not assume any specific previous knowledge of Blockchain**

## About the Course Leader

Dr. Inon Schenker is a Global Public Health specialist and consultant with over 20 years of experience in pandemics (COVID-19, Zika, H1N1, HIV). A researcher, innovator and Blockchain for Sustainable Development Goals (SDGs) Champion, working on UN, Private Sector and Government initiatives.

His knowledge of the United Nations comes from within: Dr. Schenker is one of few in Israel who worked full time as a scientist for the World Health Organization in Geneva and later as a senior consultant for ample UN agencies at global, regional and national levels.

For over 18 years Dr. Schenker leads Double Bottom Line' initiatives, which impacted the lives of millions in Africa, Latin America and Southeast Asia. At Teva Pharmaceutical Industries he managed the corporate multi-million US\$ Global Health Program subsequent to managing "Operation Abraham Consortium" in Africa.

He is a member of INATBA's Academic Advisory Body and Champion, Blockchain for SDG. He is a member of the International Association for Trusted Blockchain Applications' Social Impact and the United Africa Blockchain Association (UABA).

Dr. Schenker holds a PhD in Public Health and Science Education, Masters in public health (MPH), and B.A. in Sociology and Political Science, all from the Hebrew University of Jerusalem, Israel. His Post-doc in medical anthropology focused on Africa.

In 2019 he was honored by the American Public Health Association for his leadership in Policy Development. In 2017 he was awarded The CUGH Velji Emerging Leader Award in Global Health Innovation and the Society for International Development “All About Africa” Award for Sustainable Health.

## Course Objectives

Upon completion of the course, the student will be able to:

1. Describe Blockchain technologies in the context of benefits for society
2. Analyze and critic use-cases applying Blockchain technologies
3. Explain the 17 SDGs and the United Nations 2030 Agenda
4. Assess opportunities and challenges of new technologies for social impact
5. Critic Impact and UN development projects

## Evaluation of Student and Composition of Grade

Percentage	Assignment	Submission Date	Group Size/ Comments
20%	Participation in class	Throughout the course	Individual
30%	Development and participation in a team effort (in-class simulation)	Throughout the course	Group Project
50%	Final project	15 July 2023	Individual

\* According to University regulations, participation in all classes of a course is mandatory (Article 5).

\*\* Students who absent themselves from classes or do not actively participate in class may be removed from the course at the discretion of the lecturer. (Students remain financially liable for the course even if they are removed.)

\*\*\*An activity design to complement in-class teaching, based on an unique 5-6 hours Hackathon structure This activity may be opened to students from other faculties.

## Course Assignments

1. Class participation in all lectures by the lecturer and invited speaker(s)
2. Active participation in the in-class group simulation exercise
3. Home exam: written assessment of a published Blockchain Use-case for SDG attainment (pre-approved by lecturer)

## Grading Policy

In the 2008/9 academic year the Faculty instituted a grading policy for all graduate level courses that aims to maintain a certain level of the final course grade. Accordingly, this policy will be

applied to this course's final grades. Grades will be 83 – 87 according the MA elective courses regulations.

Additional information regarding this policy can be found on the Faculty website.

<https://coller.tau.ac.il/MBA-students/programs/2019-20/MBA/regulations/exams>

## Evaluation of the Course by Student

Following completion of the course students will participate in a teaching survey to evaluate the instructor and the course, to provide feedback for the benefit of the students, the teachers and the university.

## Course Site (Moodle)

The course site will be the primary tool to communicate messages and material to students. You should check the course site regularly for information on classes, assignments and exams, at the end of the course as well.

Course material will be available on the course site.

Please note that topics that are not covered in the course material but are discussed in class are considered integral to the course and may be tested in examinations.

## Course Outline\*

Week	Topic(s)
1	<p>Introduction to the Course's three Pillars:</p> <ul style="list-style-type: none"><li>• A - Blockchain technologies</li><li>• B - Social Impact</li><li>• C - The United Nations</li></ul> <p>Blockchain Essentials I Introduction to Social Impact Introduction to the SDGs in the UN</p>
2	<ul style="list-style-type: none"><li>• BLOCKCHAIN: Essentials part - II</li><li>• IMPACT: Measuring Impact</li><li>• UNITED NATIONS: Managing Global Challenges</li></ul>
3	<ul style="list-style-type: none"><li>• BLOCKCHAIN: Blockchain Use - Cases</li><li>• IMPACT: Managing Impact Projects</li><li>• UNITED NATIONS: The Sustainable Development Goals (SDGs)</li></ul>

Week	Topic(s)
4	<p>Guidance: preparing for the class simulation</p> <ul style="list-style-type: none"> <li>• BLOCKCHAIN: Critical review of recent development</li> <li>• IMPACT: Operation Abraham Case study</li> <li>• UNITED NATIONS: The Sustainable Development Goals (SDGs) Framework</li> </ul>
5	<ul style="list-style-type: none"> <li>• UNITED NATIONS: In Action - Guided viewing of the World Health Assembly in Geneva</li> <li>• BLOCKCHAIN: Group rehearsal "Blockchain in the UN</li> <li>• IMPACT: Ambassadors' Roundtable (Moderated discussion with several Ambassadors representing their countries in Israel)</li> </ul>
6	<p>Blockchain in the UN (Simulation):</p> <p>Instruction and setting the stage</p> <p>Class exercise: Blockchain in the UN (Simulation)</p> <p>Debriefing</p>
7	<p>Global Leaders will present their:</p> <ul style="list-style-type: none"> <li>• BLOCKCHAIN 2030 Vision: Blockchain Technologies</li> <li>• IMPACT 2030 Vision: Social Impact</li> <li>• UNITED NATIONS 2030 Vision: Reforming The UN</li> </ul> <p>Concluding Message</p>

\*Subject to change

## Reading

Mark van Rijmenam and Philippa Ryan (2019). Blockchain: transforming your business and our world. New York: Routledge.

Nakamoto, Satoshi, 2008, "Bitcoin: A Peer-to-Peer Electronic Cash System", [www.bitcoin.org](http://www.bitcoin.org), <https://bitcoin.org/bitcoin.pdf>

### Focused:

- Abderahman, R, Keogh, JG., Treiblmaier, H. (2020), "How Blockchain Technology Can Benefit Marketing: Six Pending Research Areas", Front.Blockchain, Volume 3. DOI: [10.3389/fbloc.2020.00003](https://doi.org/10.3389/fbloc.2020.00003)
- [Balzarova, M.A.](#) (2020), "Blockchain technology – a new era of ecolabelling schemes?", *Corporate Governance*, Vol. 21 No. 1, pp. 159-174. <https://doi.org/10.1108/CG-08-2020-0328>

- Bartoletti, M, Cimoli, T, Pompianu, L & Serusi, S (2018). Blockchain for social good: a quantitative analysis. GOODTECHS 2018. <https://arxiv.org/pdf/1811.03424.pdf>
- Chen, Y, Volz, U (2020), "Scaling Up Sustainable Investment through Blockchain-based Project Bonds", Asian Development Bank & Others. [http://abfer.org/media/abfer-events-2020/specialty-conf/23\\_paper\\_VolzChen\\_Scaling-Up-Sustainable-Invt-thru-Blockchain-based-Proj-Bonds.pdf](http://abfer.org/media/abfer-events-2020/specialty-conf/23_paper_VolzChen_Scaling-Up-Sustainable-Invt-thru-Blockchain-based-Proj-Bonds.pdf) (Draft report)
- Christ, K., Helliard, C. (2021), "Blockchain technology and modern slavery: Reducing deceptive recruitment in migrant worker populations", Journal of Business Research, Volume 131. <https://doi.org/10.1016/j.jbusres.2021.03.065>
- Dierksmeier, C, Seele, P. Blockchain and business ethics. *Business Ethics: A Eur Rev.* 2020; 29: 348– 359. <https://doi.org/10.1111/beer.12259>
- Dumitriu, P (2020), "Blockchain applications in the United Nations system: towards a state of readiness", Report of the Joint Inspection Unit. PP 34-54. [https://www.unjiu.org/sites/www.unjiu.org/files/jiu\\_rep\\_2020\\_7\\_english.pdf](https://www.unjiu.org/sites/www.unjiu.org/files/jiu_rep_2020_7_english.pdf)
- Fishman, A (2018). SDG Knowledge Weekly: Blockchain in Practice. 18 April 2018. <http://sdg.iisd.org/commentary/policy-briefs/sdg-knowledge-weekly-blockchain-in-practice>
- IFC (2017). Blockchain in Development – Part II: How It Can Impact Emerging Markets. World Bank. <https://www.ifc.org/wps/wcm/connect/f12309c5-e625-4ee8-bbd2-0da596419070/EMCompass+Note+41+Blockchain+in+EM+Part+II.pdf?MOD=AJPERES>
- Jutel O. (2021), "Blockchain imperialism in the Pacific", Big Data & Society. January 2021. doi:[10.1177/2053951720985249](https://doi.org/10.1177/2053951720985249)
- Parry, G., Collomosse, J. (2021), Perspectives on "Good" in Blockchain for Good", Front.Blockchain, Volume 3. DOI: [10.3389/fbloc.2020.609136](https://doi.org/10.3389/fbloc.2020.609136)
- Schenker I, Dokuzov N, Frieman O & Wageman I (2019). Blockchain Technologies, Trade Facilitation and the Sustainable Development Goals (SDGs). In: UN/CTAD - Blockchain in Trade Facilitation: Sectoral challenges and examples. [https://www.unece.org/fileadmin/DAM/cefact/cf\\_plenary/2019\\_plenary/CEFACT\\_2019\\_INF03.pdf](https://www.unece.org/fileadmin/DAM/cefact/cf_plenary/2019_plenary/CEFACT_2019_INF03.pdf)
- Schenker, I (2019). Update on Blockchain for SDGs Use Cases: ITU FG on DLT. Madrid. April 2019 <https://www.itu.int/en/ITU-T/focusgroups/dlt/Pages/default.aspx>
- Seyedsayamdost, E., and Vanderwal, P. (2020) From Good Governance to Governance for Good: Blockchain for Social Impact. *J. Int. Dev.*, 32: 943– 960. <https://doi.org/10.1002/jid.3485>.
- Stanford Business (2018). Blockchain for Social Impact – Moving Beyond the Hype. Stanford Business, Center for Social Innovation. <https://www.gsb.stanford.edu/sites/gsb/files/publication-pdf/study-blockchain-impact-moving-beyond-hype.pdf>
- Upadhyay, A, Mukhuty, S, Kumar, V, et al (2021), "Blockchain technology and the circular economy: Implications for sustainability and social responsibility", Journal of Cleaner Production, Volume 293. <https://doi.org/10.1016/j.jclepro.2021.126130>

- UNCTAD (2020), “Issues Paper on Harnessing blockchain for sustainable development: prospects and challenges”. UNCTAD. PP 28-53. [https://unctad.org/system/files/information-document/CSTD2020-2021\\_Issues02\\_Blockchain\\_rev\\_en.pdf](https://unctad.org/system/files/information-document/CSTD2020-2021_Issues02_Blockchain_rev_en.pdf)
- UNECE (2021), “Policy brief – Harnessing the potential of blockchain technology for due diligence and sustainability in cotton value chains”, Centre for Trade Facilitation and Electronic Business. [https://unece.org/sites/default/files/2021-04/ECE\\_TRADE\\_C\\_CEFAC2021\\_12E-TextilePolicyBrief\\_0.pdf](https://unece.org/sites/default/files/2021-04/ECE_TRADE_C_CEFAC2021_12E-TextilePolicyBrief_0.pdf)
- UNECE (2021). Blockchain, COVID19 Recovery & SDGs. Forum Side Event. <https://embassies.gov.il/UnGeneva/NewsAndEvents/Events/Pages/20210315-Blockchain-COVID19-Recovery-SDGs.aspx>
- Wang, Q, Su, M (2020), “Integrating blockchain technology into the energy sector — from theory of blockchain to research and application of energy blockchain”, Computer Science Review, Volume 37. <https://doi.org/10.1016/j.cosrev.2020.100275>
- World Economic Forum (2018). Building Block(chain)s for a Better Planet. [http://www3.weforum.org/docs/WEF\\_Building-Blockchains.pdf](http://www3.weforum.org/docs/WEF_Building-Blockchains.pdf)
- Zwitter, A., and Hazenberg, J. (2020), “Decentralized network governance: blockchain technology and the future of regulation”. *Front. Blockchain*. 3, 12. doi:[10.3389/fbloc.2020.00012](https://doi.org/10.3389/fbloc.2020.00012)

**Note: Reading materials for the simulation project will be provided during the class -2.**