UČNI NAČRT PREDMETA / COURSE SYLLABUS	
Predmet:	Uporaba blockchain tehnologije v gospodarstvu
Course title:	Application of blockchain technology in the economy

Študijski program in stopnja Study programme and level	**Študijska smer Study field**	**Letnik Academic year**	**Semester Semester**
Mednarodni management -2. stopnja		**1.**	**1.**
International Management – 2nd Degree		**1.**	**1.**

Vrsta predmeta / Course type	obvezni/obligatory
Univerzitetna koda predmeta / University course code:	

Predavanja Lectures	**Seminar Seminar**	**Vaje Tutorial**	**Klinične vaje work**	**Druge oblike študija**	**Samost. delo Individ. work**	**ECTS**
30		**20**			**100**	**6**

Nosilec predmeta / Lecturer:	doc. dr. Rok Bojanc

Jeziki / Languages:	**Predavanja / Lectures:**	**slovenščina/Slovenian**
	Vaje / Tutorial:	

Pogoji za vključitev v delo oz. za opravljanje študijskih obveznosti:	**Prerequisits:**
Vpis v 1. letnik.	Enrollment in 1st Year of Study.

Vsebina:	**Content (Syllabus outline):**

• Gospodarstvo in BCT • Uporaba blockchain tehnologije v gospodarstvu: proizvodnja, predelovalna industrija, hrana in prehrambena veriga vrednosti, bančništvo, zavarovalništvo, borzništvo (borza, bph, dzu) , nepremičninska dejavnost, ..	• Economy and BCT • Use of blockchain technology in the economy: production, processing industry, food and food value chain, banking, insurance, stock market, real estate, ..

Temeljni literatura in viri / Readings:

Temeljna literatura /basic literature

1. Matthew Adams. (2018). Blockchain: The History, Mechanics, Technical Implementation And Powerful Uses of Blockchain Technology. CreateSpace Independent Publishing Platform.
2. Kalfoglou, Yannis (2022) *Blockchain for Business*, Routledge, New York

Priporočljiva literatura/Recommended literature

1. Tyagi,S. urednik(2020) *Blockchain for Business: How it Works and Creates Value*. Willey & Sons
2. Jerry Cuomo. (2020). *Blockchain for Business*. Addison-Wesley Professional.
3. Antony Welfare. (2019). *Commercializing Blockchain: Strategic Applications in the Real World.* Wiley.
4. Geltar, Al. (2019). Svet kriptovalut. Samozaložba M. Končan, Ljubljana.
5. Geltar, Al. (2018). Blockchain tehnologija prihodnosti. Samozaložba M. Končan, Ljubljana.
6. Vidrih, M. ((2018). Bitcoin. Samozaložba M. Vidrih, Šmarješke toplice.
7. Laurence, T. (2017) Blockchain for dummies, Hoboken : J. Wiley, cop.
8. Swan, M. (2015) Blockchain : blueprint for a new economy, Sebastopol (CA) : O'Reilly, cop.
9. Tapscott, D. (2016) Blockchain revolution : how the technology behind bitcoin is changing money, business, and the world, Toronto (Ontario) : Portfolio Penguin.
10. Prypto (2016) Bitcoin for dummies, Hoboken : John Wiley & Sons, cop.
11. Gates, M. (2017) Blockchain : ultimate guide to understanding blockchain, bitcoin, cryptocurrencies, smart contracts and the future of money, S. l. : M. Gates, cop.
12. Popper, D. (2016) Digital Gold: Bitcoin and the Inside Story of the Misfits and Millionaires Trying to Reinvent Money, New York, HarperCollins Publisher.
13. De Filippi, Primavera; Wright, Aaron. (2018). Blockchain and the law : the rule of code, Cambridge (Massachusetts) ; London (England) : Harvard University Press.
14. Antonopoulos, Andreas M.. (2018). Mastering bitcoin : programming the open blockchain. 2nd ed., 3rd release. - Beijing [etc.] : O'Reilly.
15. Ammous, Saifedean. (2018). The bitcoin standard : the decentralized alternative to central banking. Hoboken : Wiley, cop.

Cilji in kompetence:	**Objectives and competences:**

Učna enota prispeva predvsem k razvoju naslednjih splošnih in specifičnih kompetenc: • poznavanje in razumevanje procesov blockchain tehnologije (BCT) v poslovnem okolju organizacije in sposobnost za njihovo analizo, sintezo in predvidevanje rešitev ter njihovih posledic, • poznavanje in razumevanje procesov digitalizacije in povezave z BCT, • poznavanje osnov digitalizacije poslovanja 2.0, • poznavanje delovanja BCT v različnih panogah gospodarstva (proizvodnja, predelovalna industrija, hrana in prehrambena veriga vrednosti, bančništvo, zavarovalništvo, borzništvo, nepremičninska dejavnost, …), • razumevanje uporabne vrednosti BCT v poslovanju oz. delovanju procesov, • razumevanje povezave BCT in pametnih pogodb v praksi, • sodelovanje z interesnimi skupinami (dobavitelji, kupci, konkurenco in politiko,..) pri izvajanju analize potreb uporabe BCT, • izvajanje skupinskega dela na primerih dobre prakse ter v sodelovanju z konkretnimi podjetji in inštitucijami, • intenzivno in stalno uporabo BCT na svojem konkretnem delovnem področju in podobno, • koherentno obvladanje temeljnega znanja o BCT, pridobljenega pri posameznih predmetih ter sposobnost povezovanja znanja z različnih področij in njegova aplikativna uporaba pri implementaciji v prakso, • zmožnost sistemskega pristopa.	**General and specific competencies:** • knowling and understanding of blockchain technology (BCT) processes in the organization's business environment and the ability to analyze them, synthesize and predict solutions and their consequences, • knowing and understanding of digitization processes and the connection with BCT, • knowing the basics of digitalization of business 2.0, • knowing the operation of BCT in various branches of the economy (production, processing industry, food and food value chain, banking, insurance, stock exchange, real estate activity, ...), • understanding the added value of BCT in business and operation of processes, • understanding the connection between BCT and smart contracts in practice, • cooperation with interest groups (suppliers, buyers, competition and politics,...) in the implementation of the needs analysis for the use of BCT, • performing group work on examples of good practice and in cooperation with companies and institutions, • intensive and continuous use of BCT in specific work area, • coherent mastery of basic knowledge about BCT acquired in individual courses and the ability to combine knowledge from different fields and its application in implementation in practice, • systematic approach.
Predvideni študijski rezultati:	**Intended learning outcomes:**

Znanje in razumevanje: Študent/študentka: • pozna in razume procese delovanja BC tehnologije, • pozna in razume osnove delovanja in aktivnosti digitalizacije 2.0, • razume interakcijsko delovanje dejavnikov, ki vplivajo na uspešnost vključevanja BCT v poslovne modele poslovanja, • uporablja naučeno snov na področju BCT v novih situacijah v delovnem okolju, • pozna delovanje BCT v različnih panogah gospodarstva, • kritično spremlja in reflektira aktualno stanje na področju razvoja BCT za snovanje učinkovitega ukrepanja na poslu, • v skupini študentov (iz različnih panog in predznanja) analizira primere ter jih smiselno povezuje v nove poslovne modele uporabe BCT, • v povezavi z drugimi predmeti pozna, razume in reflektira kompleksnost strokovnih in družbenih nalog ter vpliva BCT na posameznika, podjetja ter na družbo, • svoje predloge in ideje pri snovanju novih modelov poslovanja in uporabe BCT) ovrednoti z vidika določenih kriterije ter pozna in razume njihov vpliv na lokalno in evropsko ter svetovno gospodarstvo in družbo.	Knowledge and understanding: Student: • knows and understands the operating processes of BC technology, • knows and understands the basics of operation and activities of digitalization 2.0, • understands the interaction of factors that affect the success of BCT integration into business models, • uses learned material in the field of BCT in new situations in the work environment, • knows the operation of BCT in various branches of the economy, • critically monitors and reflects on the current situation in the field of BCT development in order to design effective action at work, • analyzes cases and meaningfully connects them into new business models for the use of BCT (in a group of students from different industries and prior knowledge), • in connection with other subjects, knows, understands and reflects the complexity of professional and social tasks and the impact of BCT on individuals, companies and society, • evaluates proposals and ideas (when designing new business models and the use of BCT) and knows and understands their impact on the local, European and global economy and society. .

Metode poučevanja in učenja:	**Learning and teaching methods:**

• predavanja z aktivno udeležbo študentov (razlaga, diskusija, vprašanja, primeri, reševanje problemov, ekskurzija, uporaba interneta in orodij IKT tehnologije); • seminarske vaje v povezavi s prakso (refleksija izkušenj, projektno delo, timsko delo, metode kritičnega mišljenja, diskusija, študije primerov, snovanje novih primerov); • individualne in skupinske konzultacije (diskusija, dodatna razlaga, obravnava specifičnih aktualnih vprašanj oz. tematike; • oblikovanje in profiliranje posameznika za samostojen študij (motiviranje, usmerjanje, samoopazovanje, samouravnavanje, refleksija, samoocenjevanje). • skupne projektne naloge (v skupinah študentov iz različnih panog in predznanja) in izdelava aplikativne in interdisciplinarne projektne naloge • analiza člankov v področja BCT ter kritična uporaba njihove vsebine pri izdelavi novih poslovnih BCT modelov v praksi • E-učenje • Kombiniran način študija	• lectures with active participation of students (explanation, discussion, questions, examples, problem solving, excursion, use of the Internet and ICT technology tools); • seminar exercises in connection with practice (reflection of experiences, project work, team work, methods of critical thinking, discussion, case studies, creation of new cases); • individual and group consultations (discussion, additional explanation, treatment of specific current issues or topics with • designing and profiling an individual for independent study (motivation, guidance, self-observation, self-regulation, reflection, self-assessment). • joint project tasks (in groups of students from different industries and prior knowledge) and the creation of an applied and interdisciplinary project task • analysis of articles in the field of BCT and critical use of their content in the creation of new business BCT models in practice • E-learning • Blended Learning

Načini ocenjevanja:	Delež (v %) / Weight (in %)	**Assessment:**
Način (pisni izpit, ustno izpraševanje, naloge, projekt)		Type (examination, oral, coursework, project):
• pisni izpit • analiza članka oz. poročila • (skupna) projektna naloga in javna predstavitev	40 % 30 % 30 %	• written exam • analysis of the article or reports • (joint) project task and public presentation

Reference nosilca / Lecturer's references:

BOJANC, Rok, PUCIHAR, Andreja, LENART, Gregor. Razvoj uporabe e-računov v Sloveniji = Development of e-invoicing in Slovenia. *Uporabna informatika*. [Tiskana izd.]. 2023, letn. 31, št. 3, str. 111-127, ilustr., graf. prikazi. ISSN 1318-1882. https://uporabna-informatika.si/ui/article/view/212, DOI: 10.31449/upinf.212. [COBISS.SI-ID 171752451]

JERMAN-BLAŽIČ, Borka, MATSKANIS, Nikolaos, BOJANC, Rok. Semantic ontology design for a multi-cooperative first responder interoperable platform. *Computing and informatics*. 2016, vol. 35, no. 6, str. 1249-1276. ISSN 1335-9150. [COBISS.SI-ID 30268711]
BOJANC, Rok, JERMAN-BLAŽIČ, Borka. A quantitative model for information-security risk management. *Engineering management journal*. 2013, vol. 25, no. 3, str. 25-37. ISSN 1042-9247. [COBISS.SI-ID 26755879]