

| UČNI NAČRT PREDMETA/COURSE SYLLABUS | |
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| Predmet Course title | Modeli za odločanje Decision-making Models |

| Študijski program in stopnja Study programme and level | Študijska smer Study field | Letnik Academic year | Semester Semester |
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| Upravljanje z okoljem/ 2. stopnja Environmental Management/ 2 nd Cycle | Ni smeri študija No study field | 1. letnik 1 st year | 2. 2 nd |
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| Vrsta predmeta/Course type | obvezni/obligatory |
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| Univerzitetna koda predmeta/University course code | 2_UO_1_UN8 |
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| Predavanja Lectures | Seminar Seminar | Sem. vaje Tutorial | Lab. vaje Laboratory work | Teren. vaje Field work | Samost. delo Individ. work | ECTS |
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| 30 | | 30 | | | 115 | 7 |

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| Nosilec predmeta/Lecturer: | izr. prof. dr. Laura Južnik Rotar |
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| Jeziki/ Languages: | Predavanja/Lectures: slovenski/Slovenian |
| | Vaje/Tutorial: slovenski/Slovenian |

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| Pogoji za vključitev v delo oz. za opravljanje študijskih obveznosti: | Prerequisites: |
| <ul style="list-style-type: none"> • Vpis v prvi letnik študijskega programa. • Študent mora pred izpitom pripraviti in predstaviti ter zagovarjati raziskovalno nalogo. | <ul style="list-style-type: none"> • A prerequisite for inclusion is enrolment in the first year of study. • Student has to prepare, present and defend a research paper before the examination. |

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| Vsebina: | Content (Syllabus outline): |
| <ul style="list-style-type: none"> • <i>Modeli za odločanje v menedžmentu.</i> Proces odločanja. Interdisciplinarni okvir odločanja. Metode večparametrskega odločanja. • <i>Teorija odločitev.</i> Poslovno odločanje in analitika. Odločitvena analiza. Modeli in pristopi za podatkovno rudarjenje. • <i>Modeli za odločanje na podlagi podatkov.</i> Podatki in vrste podatkov. Osnove verjetnosti. Testiranje hipotez. Regresijski modeli. Modeli za napovedovanje. Modeli za ocenjevanje učinkov. | <ul style="list-style-type: none"> • <i>Decision models in management.</i> Decision-making process. Interdisciplinary framework of decision making. Multicriteria decision making methods. • <i>Decision theory.</i> Business decision making and analytics. Decision analysis. Data mining models and approaches. • <i>Decision models based on data.</i> Data and data types. Fundamentals of probability theory. Hypothesis testing. |

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| | Regression models. Forecasting models. Impact evaluation models. |
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Temeljna literatura in viri/Readings:

Temeljna literatura/Basic literature

- Ragsdale, C. (2018). Spreadsheet Modeling and Decision Analysis: A Practical Introduction to Business Analytics. Boston: Cengage Learning (pogl. 1, 9, 11, 14).
- Južnik Rotar, L. (2017). Modeli za odločanje. Novo mesto: Fakulteta za upravljanje, poslovanje in informatiko (pogl. 2, 3).
- Evans, J.R. (2013). Statistics, Data Analysis and Decision Modeling. Boston: Pearson (pogl. 4, 5, 11).
- Gertler, P.J., Martinez, S., Premand, P., Rawlings, L.B. in Vermeersch, C.M.J. (2016). Impact evaluation in practice. Washington: World Bank (pogl. 3, 4, 7, 8, 9).

Priporočljiva literatura/Recommended literature

- Albright, C in Winston, W.L. (2019). Business Analytics: Data Analysis and Decision Making. Boston: Cengage Learning.
- Bohanec, M. (2012). Odločanje in modeli. Ljubljana: DMFA.

Cilji in kompetence:

Učna enota prispeva predvsem k razvoju naslednjih splošnih in specifičnih kompetenc:

- poznavanje in razumevanje procesov v poslovniem okolju organizacije in sposobnost za njihovo analizo, sintezo in predvidevanje rešitev ter njihovih posledic,
- usposobljenost za raziskovanje na področju upravljanja in poslovanja ter razvoj kritične in samokritične presoje,
- fleksibilna uporaba znanja v praksi,
- sposobnost za reševanje konkretnih delovnih problemov na področju upravljanja in poslovanja z uporabo znanstvenih metod in postopkov,
- sposobnost pridobivanja, selekcije in evalvacije novih informacij in zmožnost ustrezne interpretacije v kontekstu na področju ekonomije, podjetništva, poslovne informatike, človeških virov, kvantitativnih metod, prava in poslovodenja,
- razumevanje in uporaba metod kritične analize in razvoja teorij ter njihova uporaba pri reševanju konkretnih delovnih problemov,

Objectives and competences:

The learning unit mainly contributes to the development of the following general and specific competences:

- knowledge and understanding of processes in the organisational business environment and ability to analyse, synthesise and predict solutions and their consequences,
- ability to research in the field of management and business and develop critical judgement and self-assessment,
- flexible use of knowledge in practice,
- ability to solve concrete work problems in the field of business and management using scientific methods and procedures,
- ability to access, select and evaluate new information and the ability to interpret it appropriately in the context of economics, entrepreneurship, business information technology, dealing with people, quantitative methods, law and management,
- understanding and application of methods of critical analysis, development of theories and their

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| <ul style="list-style-type: none"> • sposobnost uporabe informacijsko-komunikacijske tehnologije in sistemov na področju upravljanja in poslovanja. | <p>application in solving practical, work-related problems,</p> <ul style="list-style-type: none"> • ability to use ICT and apply systems in business and management. |
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Predvideni študijski rezultati:

Študent/študentka:

- razume in pojasni interdisciplinarno naravo procesa odločanja,
- pozna glavne vrste modelov za odločanje ter njihove smotre in cilje,
- sposoben identificirati potrebo po kvantitativnih menedžerskih modelih za odločanje z namenom izboljšanja odločanja v poslovнем kontekstu,
- sposoben uporabiti ustrezne odločitvene modele in jih rešiti,
- zna uporabljati sodobna programska orodja za podporo odločanju,
- zna samostojno obdelati konkreten problem odločanja iz poslovnega okolja.

Intended learning outcomes:

Students:

- understand and explain the interdisciplinary nature of decision-making processes,
- are familiar with the basic types of decision models as well as their goals and objectives,
- are able to identify the need for quantitative managerial decision models to improve decision making in a business context,
- are able to apply and solve appropriate decision models,
- know how to use contemporary computer programs to support decision making,
- are capable of independent analysis of concrete decision problem from the business environment.

Metode poučevanja in učenja:

- *predavanja* z aktivno udeležbo študentov (razлага, diskusija, vprašanja, primeri, reševanje problemov),
- *seminarske vaje*: priprava, predstavitev in uspešen zagovor raziskovalne naloge, reševanje problemov, študije primera, kritično presojanje, diskusija, refleksija izkušenj, vrednotenje, projektno delo, timsko delo.

Learning and teaching methods:

- *lectures* with active student participation (explanation, discussion, questions, examples, problem solving),
- *seminar tutorial*: preparation, presentation and successful defence of a research paper, problem solving, case studies, methods of critical thinking, discussion, reflection of experience, evaluation, project work, team work.

Načini ocenjevanja:

Delež (v %)
Weight (in %)

Assessment:

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| <p>Načini:</p> <ul style="list-style-type: none"> • izpit • izdelava, predstavitev in zagovor raziskovalne naloge | <p>60 %</p> <p>40 %</p> | <p>Types:</p> <ul style="list-style-type: none"> • examination • preparation, presentation and defence of the research paper |
| <p>Ocenjevalna lestvica: ECTS.</p> | | <p>Grading scheme: ECTS.</p> |