

	UČNI NAČRT PREDMETA/COURSE SYLLABUS
Predmet	Okoljske inovacije
Course title	Environmental Innovations

Študijski program in stopnja Study programme and level	Študijska smer Study field	Letnik Academic year	Semester Semester
Upravljanje z okoljem/ 2. stopnja	Ni smeri študija	2. letnik	3.
Environmental Management/ 2 nd Cycle	No study field	2 nd year	3 rd

Vrsta predmeta/Course type obvezni/obligatory

Univerzitetna koda predmeta/University course code 2_UO_2_UN2

Predavanja	Seminar	Sem. vaje	Lab. vaje	Teren. vaje	Samost. delo	ECTS
Lectures	Seminar	Tutorial	Laboratory work	Field work	Individ. work	
30		15			105	6

Nosilec predmeta/Lecturer: doc. dr. Aleksandar Šobot

Jeziki/ Languages:	Predavanja/Lectures:	slovenski/Slovenian
	Vaje/Tutorial:	slovenski/Slovenian

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

Vsebina:	Content (Syllabus outline):
<ul style="list-style-type: none"> <i>Osnovna terminologija okoljskih inovacij</i> (opredelitev pojmov in značilnosti –invencija, inovacija, inovacijska družba, inovacijski proces, inovacijski sistemi, zaprte in odprte inovacije). <i>Kvantifikacija okoljskega vpliva proizvodov in investicijskih projektov</i> (modeli in metode za presojo okoljskih proizvodov – matrika MECO, eko-indikatorji, analiza življenjskega cikla, ogljični odtis). 	<ul style="list-style-type: none"> <i>Introduction to the concept of eco-innovation</i> (definition of terms and characteristics - invention, innovation, innovation society, innovation process, innovation systems, closed and open innovations). <i>Quantification of the environmental impact of products and investment projects</i> (models and methods for environmental product assessment - MECO matrix, eco indicators, life cycle analysis, carbon footprint).

<ul style="list-style-type: none"> • <i>Inoviranje poslovnih modelov in pristopi k izkoriščanju razpoložljivega znanja</i> (značilnosti, ovire, orodja – Kanvas poslovnega modela in sorodni). • <i>Razvoj okoljske inovacije</i> (motivacijski dejavniki, tehnike kreativnosti, viri znanja in idej, opredelitev specifikacij proizvoda in oblikovanje, priprava na proizvodnjo in lansiranje). • <i>Podjetniško mreženje v globalnem okolju</i> (povezovanje z raziskovalnim in industrijskim okoljem). • <i>Management in trženje eko-inovativnih izdelkov in storitev</i> (vodenje, koordinacija in organizacija dejavnosti, trženje). • <i>Sodobni pristopi v prodaji trajnostnih izdelkov in storitev</i> (prodajni kanali in načini prodaje). • <i>Pravna zaščita okoljskih inovacij</i> (pomen, vrste, postopki). • <i>Alternativni viri financiranja in podpora rasti</i> (poslovni angeli, platforme za množična financiranja, podjetniški pospeševalniki, domači in tuji razpisi, spodbude in projekti). • <i>Okoljsko inoviranje v malih in srednje velikih podjetjih</i>. • <i>Dejavniki uspeha okoljskega inoviranja in primeri iz prakse</i>. 	<ul style="list-style-type: none"> • <i>Innovation of business models and approaches to utilization of existing knowledge</i> (characteristics, barriers and tools – Business Model Canvas and related). • <i>Development of eco-innovation</i> (motivational factors, creativity techniques, sources of knowledge and ideas, product specifications and design, preparation for production and market launch). • <i>Entrepreneurial networking in a global environment</i> (integration with research and industrial environment). • <i>Management and marketing of eco-innovative products and services</i> (management, coordination and organization of activities, marketing). • <i>Modern sales channels and methods for eco-friendly products and services</i> (distribution channels and sales methods). • <i>Legal protection of environmental innovations</i> (meaning, types, procedures). • <i>Alternative sources of funding and growth support</i> (business angels, crowdfunding platforms, seed accelerators, domestic and foreign tenders and incentives). • <i>Eco-innovation in small and medium-sized enterprises</i>. • <i>Success factors for eco-innovation and best practices</i>.
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Temeljna literatura in viri/Readings:

Temeljna literatura/Basic literature

- EIO and CfSD (2016), 2nd edition, Eco-innovate! A guide to eco-innovation for SMEs and business coaches. Eco-Innovation Observatory. Funded by the European Commission, DG Environment, Brussels. (Poglavja 3, 4).
- Krajnc, D. (2014). Eko-dizajn. Okoljsko načrtovanje, razvoj in analiziranje proizvodov in procesov. Maribor: Univerza v Mariboru.
- Romanowski, P. (2021): Sustainable Development: Innovations in Business. Poznan University of Economics and Business

Priporočljiva literatura/Recommended literature

- Bocken, N. M. P., Farracho, M., Bosworth, R. in Kemp, R. (2014). The front-end of eco-innovation for eco-innovative small and medium sized companies. Journal of Engineering and Technology Management, 31, str. 43-57.

- Doranova, A., Miedzinski, M., Van der Veen, G., Reid, A., Leon, L. R., Ploeg, M., ... in Joller, L. (2012). Business models for systemic eco-innovations. Final report, Technopolis group, Brussels.
- Heikkilä, M., Bouwman, H., Heikkilä, J., Haaker, T., Lopez-Nicolas, C., in Riedl, A. (2016). Business Model Innovation Paths and Tools. Bled: eCommerce Conference.
- Likar, B., Chovan, C., Fatur, P., Kullbjer, A.,...in Tsaggaris, V. (2006). Management inovacijskih in RR procesov v EU. Ljubljana: Korona plus d.o.o.
- The Future of eco-innovation: The role of business models in green transformation (2012). OECD/European Commission/Nordic Innovation Joint Workshop: Copenhagen, Denmark.
- Yeng, W. F. in Yazdanifard, R. (2015). Green marketing: A Study of Consumers Buying Behavior in Relation to Green Products. Global Journal of Management and Business Research, 15(5).

Cilji in kompetence:

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

- poznavanje in razumevanje procesov v okolju ter usposobljenost za njihovo analizo, sintezo in predvidevanje rešitev oziroma posledic,
- usposobljenost za prepoznavanje potreb po spremembah in uvajanje okoljskih inovacij,
- celovito kritično mišljenje, sposobnost analize, sinteze in predvidevanje rešitev s področja inovacijskih problemov v okolju in drugih družbenih ved (interdisciplinarnost),
- sposobnost za reševanje konkretnih problemov v okolju z uporabo analitičnih, raziskovalnih in drugih metod in postopkov,
- poznavanje okoljskih inovacij, sposobnost aplikacije novih spoznanj, informacij in interpretacij v kontekstu upravljanja z okoljem.

Objectives and competences:

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

- understanding of processes in the environment and ability to analyse, synthesize and anticipate solutions and consequences,
- ability to identify the need for change and innovation in the environment,
- ability to analyse, synthesize and anticipate solutions in the field of innovation problems in the environment and other social sciences (interdisciplinarity),
- ability to solve specific environmental problems using analytical, research and other methods and procedures,
- knowledge and understanding of environmental innovations, ability to apply new findings, information and interpretations in the context of environmental management.

Predvideni študijski rezultati:

Študent/študentka:

- usvoji koncept okoljskih inovacij ter ovrednoti procese/aktivnosti/dejavnosti na tem področju,
- se usposobi za uporabo teorije in raziskav s področja okoljskega inoviranja,
- se usposobi za trženje in prodajo trajnostnih izdelkov in storitev,

Intended learning outcomes:

Students:

- master the concept of eco-innovation and evaluate about the processes and activities in this field,
- are trained in the application of theory and research in the field of environmental innovation,
- are trained in the marketing of eco-products and services,

<ul style="list-style-type: none"> • razvije sposobnost analiziranja tehničnih, pravnih, finančnih in okoljskih informacij za razumevanje in ocenjevanje kompleksnih okoljskih problemov, • zna kritično sintetizirati informacije za ovrednotenje poslovnih priložnosti, povezanih z okoljsko problematiko, • ustvari predloge za ekološke inovacije in pripravi predstavitev za skupino strokovnjakov. 	<ul style="list-style-type: none"> • develop the ability to analyse technical, legal, financial and environmental information in order to understand and evaluate complex environmental problems, • are able to critically synthesize information to evaluate business opportunities related to environmental issues, • create eco-innovations proposals and prepare presentations for a team of experts.
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Metode poučevanja in učenja:

Learning and teaching methods:

<ul style="list-style-type: none"> • <i>predavanja</i> z aktivno udeležbo študentov (razlaga, diskusija, vprašanja, primeri, reševanje problemov), • <i>seminarske vaje</i>: priprava, predstavitev in uspešen zagovor projektne naloge (reševanje problemov, študije primera, kritično presojanje, diskusija, refleksija izkušenj, projektno delo, timsko delo). 	<ul style="list-style-type: none"> • <i>lectures</i> with active student participation (explanation, discussion, questions, examples, problem solving), • <i>seminar tutorial</i>: preparation, presentation and a successful defence of a project paper (problem-solving, case studies, methods of critical thinking, discussion, a reflection of experience, project work, teamwork).
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Načini ocenjevanja:

Delež (v %)

Weight (in %)

Assessment:

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