

UČNI NAČRT PREDMETA / COURSE SYLLABUS

Predmet:	Ekonomika in družba
Course title:	Economics and Society

Študijski program in stopnja Study programme and level	Študijska smer Study field	Letnik Academic year	Semester Semester
Nanoznanosti in nanotehnologije / Informacijske in komunikacijske tehnologije / Ekotehnologije / Senzorske tehnologije, 3. stopnja		1	1
Nanosciences and Nanotechnologies / Information and Communication Technologies / Ecotechnologies / Sensor Technologies, 3 rd cycle		1	1

Vrsta predmeta / Course type

Izbirni / Elective

Univerzitetna koda predmeta / University course code:

SPL-875

Predavanja Lectures	Seminar Seminar	Sem. vaje Tutorial	Lab. vaje Laboratory work	Druge oblike Others	Samost. delo Individ. work	ECTS
15	15			15	105	5

**Navedena porazdelitev ur velja, če je vpisanih vsaj 15 študentov. Drugače se obseg izvedbe kontaktnih ur sorazmerno zmanjša in prenese v samostojno delo. / This distribution of hours is valid if at least 15 students are enrolled. Otherwise the contact hours are linearly reduced and transferred to individual work.*

Nosilec predmeta / Lecturer:

Prof. dr. Aleksander Zidanšek
Prof. dr. Peter Stanovnik
Prof. dr. Ivo Šlaus

**Jeziki /
Languages:**

Predavanja / Lectures: slovenščina, angleščina / Slovenian, English
Vaje / Tutorial:

Pogoji za vključitev v delo oz. za opravljanje študijskih obveznosti:

Zaključen študij druge stopnje naravoslovne ali tehniške smeri ali zaključen študij z drugih področij z dokazanim poznavanjem osnov področja predmeta (pisna dokazila, pogovor).

Prerequisites:

Completed second level studies in natural sciences or engineering or completed studies in other fields with proven knowledge of fundamentals in the field of this course (certificates, interview).

Vsebina:

Lastnosti sodobnega sveta:
- globalizacija
- povezanost
- hitre spremembe
- negotovost in nestabilnost
- družbena singularnost
Okolje in koncept trajnostnega razvoja:

Content (Syllabus outline):

Features of the modern world
- globalisation
- interdependence
- fast changing
- uncertainty and instability
- societal singularity
Environment and the concept of sustainable

<ul style="list-style-type: none"> - naravni in človeški viri - blagostanje in družbene razmere - nova razvojna paradigma - cilji trajnostnega razvoja - indikatorji trajnostnega razvoja <p>Ekonomika za raziskovalce</p> <ul style="list-style-type: none"> - trg, ponudba in povpraševanje - davki in subvencije - finančna analiza projektov (presoja investicij v pogojih gotovosti in negotovosti) <p>Inovacijski management</p> <ul style="list-style-type: none"> - na znanju osnovana družba - globalni inovacijski in tehnološki trendi - opredelitev in značilnosti nacionalnega inovacijskega sistema; merjenje inovativnosti - zaprti in odprti inovacijski podjetniški sistemi - inovacijske in RR strategije - organizacija inovacijske dejavnosti in management R&R projektov - dejavniki, ki prispevajo k (ne)uspehu inovacije - inovativnost srednjih in malih podjetij - podjetja, osnovana na novih tehnologijah - značilnosti slovenskega inovacijskega sistema - evropski regionalni inovacijski sistemi 	<p>development</p> <ul style="list-style-type: none"> - natural and human resources - well-being and social conditions - new development paradigm - sustainable development goals - sustainable development indicators <p>Economics for researchers</p> <ul style="list-style-type: none"> - Market, supply and demand - Taxes and grants - Financial analysis of projects (assessment of investments under conditions of certainty and uncertainty) <p>Innovation management</p> <ul style="list-style-type: none"> - Knowledge-based society - Global innovation and technological trends - Definition and characteristics of national innovation system; measures of innovativeness - Closed and open innovation systems - Innovation and R&D strategies - Organization of innovation activity; management of R&D projects - Factors contributing to the success/failure of an innovation - Innovativeness of small and medium-sized enterprises - New technology-based enterprises - Characteristics of Slovenian innovation system - European regional innovation systems
---	---

Temeljna literatura in viri / Readings:

Izbrani novejši članki iz znanstvenih revij s tega področja in izbrana poglavja iz / Selected recent articles from scientific journals in this field and selected chapters from:

E. von Weizsaecker: Factor 5: Transforming the Global Economy through 80% Increase in Resource Productivity, Earthscan, UK and Droemer, Germany, 2009, ISBN 978-1-84407-591-1

D. H. Meadows et al.: Limits to Growth The 30-Year Update, Chelsea Green Publ, 2004, ISBN: 9781931498586

J. Randers, 2052: A Global Forecast for the Next Forty Years, Chelsea Green Publishing, 2012, ISBN 978-1603584210

H.M. Markowitz & K. Blay, Risk-Return Analysis: The Theory and Practice of Rational Investing, McGraw-Hill Education, 2013, ISBN 978-0071817936

OECD Science, Technology and Industry Scoreboard 2017, OECD, ISBN 978-92-64-26881-4

P. Swann, The Economics of Innovation, Edward Elgar, Cheltenham, 2009, ISBN 978-1848440272

D. Audretsch et al., Concise Guide to Entrepreneurship, Technology and Innovation, Edward Elgar Publishing, Cheltenham, 2015

Cilji in kompetence:

Pripraviti študente za reševanje kritičnih izzivov trajnostnega razvoja na lokalnem in globalnem nivoju.

Splošne kompetence:

- sposobnost za samostojno in skupinsko raziskovalno in razvojno delo,
- sposobnost uporabe znanja v praksi
- delno tudi razvoj integralnega načina mišljenja ter sposobnost za komunikacijo s strokovnjaki drugih disciplin in področij.

Predmetnospecifične kompetence:

- obvladovanje metod in tehnik znanstvenega raziskovanja s področja trajnostnega razvoja, ekonomike, nacionalnega in podjetniškega inovacijskega managementa.

Objectives and competences:

To prepare the students for solving the critical challenges of sustainable development both at the local and global level.

General competences:

- ability to carry out independent as well as team R&D work,
- ability to use the knowledge in practice,
- and partially also to the development of an integral way of thinking and the ability to communicate with experts from other disciplines and fields.

Course specific competences:

- mastering of methods and techniques of scientific research work in the field of sustainable development, economics, national and business innovation management.

Predvideni študijski rezultati:Znanje in razumevanje:

- Razumevanje koncepta trajnostnega razvoja
- Razumevanje sodobnih tehnoloških sprememb v mednarodnem okolju

Vrednotenje in sinteza:

- vzpostaviti model trajnostnega razvoja za izbran interdisciplinarni problem,
- ovrednotiti možne rešitve izbranega problema s stališča trajnostnega razvoja,
- sposobnost finančne analize projektov,
- vrednotenje in ocenjevanje nacionalnega R&R ter inovacijskega sistema,
- vzpostaviti sposobnost komunikacije v angleškem jeziku na področju trajnostnega razvoja, ekonomike in inovacijskega managementa.

Intended learning outcomes:Knowledge and Understanding

- Understanding the concept of sustainable development
- Understanding contemporary technological changes in the global/international context

Evaluation and synthesis:

- Establish a sustainable development model for a selected interdisciplinary problem
- Evaluate possible solutions of a selected problem from the sustainable point of view
- Ability for financial assessment of projects
- Evaluate national R&D and innovation system
- Establish the ability to communicate in English in the field of sustainable development, economics and innovation management

Metode poučevanja in učenja:

Predavanja, seminarji, konzultacije, praktično delo, individualno delo

Learning and teaching methods:

Lectures, seminars, consultancy, field work, individual work

Delež (v %) /

Načini ocenjevanja:

Weight (in %)

Assessment:

Seminarska naloga	30 %	Seminar work
Ustni zagovor seminarske naloge	30 %	Oral defense of seminar work
Pisni ali ustni izpit	40 %	Written or oral exam

Reference nosilca / Lecturer's references:

- A. Abina, U. Puc, A. Jeglič, A. Zidanšek. Structural analysis of insulating polymer foams with terahertz spectroscopy and imaging. *Polymer testing*, ISSN 0142-9418. [Print ed.], 2013, vol. 32, issue 4, str. 739-747, doi: 10.1016/j.polymertesting.2013.03.004
- A. Abina, U. Puc, A. Jeglič, J. Kemperl, R. Venckevičius, I. Kašalynas, G. Valušis, A. Zidanšek. Qualitative and quantitative analysis of calcium-based microfillers using terahertz spectroscopy and imaging. *Talanta*, ISSN 0039-9140. [Print ed.], 2015, vol. 143, str. 169-177, doi: 10.1016/j.talanta.2015.05.027
- A. Zidanšek, M. Gliha. Electromagnetic sensing of building materials for circular economy. 12th Conference on Sustainable Development of Energy, Water and Environment Systems, 2017, Dubrovnik, Croatia, ISSN 1847-7186
- A. Zidanšek, I. Šlaus. Blockchain technology as an opportunity to increase public trust in circular economy. 12th Conference on Sustainable Development of Energy, Water and Environment Systems, 2017, Dubrovnik, Croatia, ISSN 1847-7186
- S. Uršič, P. Stanovnik, M. Drnovšek. Spremljanje nacionalne konkurenčnosti Slovenije po metodologiji IMD za leta 2013-2017, IER, EF Univerze v Ljubljani, Ljubljana 2017