

UČNI NAČRT PREDMETA/COURSE SYLLABUS	
Predmet Course title	Praktično izobraževanje Practical Training

Študijski program in stopnja Study programme and level	Študijska smer Study field	Letnik Academic year	Semester Semester
Upravljanje z okoljem/ 1. stopnja Environmental Management/ 1 st Cycle	Ni smeri študija No study field	3. letnik 3 rd year	6. 6 th

Vrsta predmeta/Course type	obvezni/obligatory
----------------------------	--------------------

Univerzitetna koda predmeta/University course code	1_UO_3_UN7
--	------------

Predavanja Lectures	Seminar Seminar	Sem. vaje Tutorial	Lab. vaje Laboratory work	Teren. vaje Field work	Samost. delo Individ. work	ECTS
				360		18

Nosilec predmeta/Lecturer:	pred. Marko Starc, mag. ekon. in posl. ved. – organizator praktičnega izobraževanja
----------------------------	--

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

Pogoji za vključitev v delo oz. za opravljanje študijskih obveznosti:	Prerequisites:
• Vpis v tretji letnik študijskega programa.	• A prerequisite for inclusion is enrolment in the third year of study.

Vsebina:	Content (Syllabus outline):
<p><i>Varstvo okolja in trajnostni razvoj (pomembnejše vsebine)</i></p> <ul style="list-style-type: none"> • Varstvo okolja. • Temelji koncepta varovanja okolja. • Pregled EU in SI okoljskih ciljev. • Varstvo okolja v slovenski zakonodaji (temeljni pojmi, glavni principi, cilji, temeljna poglavja). • Trajnostni razvoj. Cilji trajnostnega razvoja. • Pregled ciljev trajnostnega razvoja glede na njihov pomen za razvoj družbe. • Zagotavljanje dosegljivosti in trajnostno upravljanje z vodo in čiščenje odpadnih voda. 	<p><i>Environmental Protection and Sustainable Development (important content)</i></p> <ul style="list-style-type: none"> • Environmental Protection. • Introduction to the environmental protection concept. • Definition and context of environmental protection issues. • Environmental protection in Slovenian legislation (main terminology, general principles, aims, main chapters). • Sustainable Development. Goals of Sustainable Development. • Ensure availability and sustainable management of water and sanitation for all.

<ul style="list-style-type: none"> • Zagotovljanje dosegljive, zanesljive, trajnostne in moderne energije za vse. • Trajnostna mesta in naselja kot vključujoča in varna. • Izvajanje podnebnih ukrepov. • Varovanje, obnavljanje in promoviranje trajnostne rabe ekosistemov, gozdov, ustavitev dezertifikacije, degradacije tal in zmanjševanja biotske raznovrstnosti. • Globalno partnerstvo za cilje trajnostnega razvoja. • Trajnostni razvoj v slovenski zakonodaji. 	<ul style="list-style-type: none"> • Ensure access to affordable, reliable, sustainable and modern energy for all. • Make cities and human settlements inclusive, safe, resilient and sustainable. • Take urgent action to combat climate change and its impacts. • Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss. • Global Partnership for Sustainable Development. • Sustainable development in Slovenian legislation.
<p>Spremljanje stanja okolja (pomembnejše vsebine)</p> <ul style="list-style-type: none"> • Pomen spremeljanja stanja okolja (vloga pri okoljskem in gospodarskem načrtovanju). • Sistemi spremeljanja stanja okolja (cilji, praksa v svetu in Sloveniji). • Spremljanje stanja naravnih pojavov (pomen, vrste pojavov, vrste nalog, obseg, standardi). • Spremljanje stanja za splošne okoljske informacije (namen, vrste monitoringa, obseg). • Spremljanje stanja zaradi obremenitev okolja (vrste monitoringa, predmet monitoringa, namen, izvajanje). • Spremljanje stanja zraka (izhodišča, namen in cilji, parametri, indikatorji, standardi). • Spremljanje stanja tal (izhodišča, namen in cilji, parametri, indikatorji, standardi). • Spremljanje stanja voda (izhodišča, namen in cilji, parametri, indikatorji, standardi). • Izvajanje spremeljanja stanja (programi monitoringa, pooblastila, pogoji, evidenca izvajalcev, zagotavljanje kakovosti). • Orodja za spremeljanja stanja okolja - (vrste, namen, uporabnost). • Informacijski sistem okolja (namen, vsebina, vir in upravljanje podatkov). <i>Poročanje in objavljanje podatkov o stanju okolja</i> (format-vsebina, 	<p>Environmental monitoring (important content)</p> <ul style="list-style-type: none"> • Significance of environmental monitoring (the role at environmental planning, economic planning). • Environmental monitoring systems (objectives, worldwide practice, Slovenian approach). • Monitoring of natural phenomena (purpose, types of phenomena, scope, standards). • Monitoring for general environmental information (purpose, monitoring types, scope). • Monitoring due to pressures (pressure types, monitoring subject, purpose, performance). • Air quality monitoring (baseline, purpose and objectives, parameters, indicators, standards). • Soil monitoring (baseline, purpose and objectives, parameters, indicators, standards). • Water quality monitoring (baseline, purpose and objectives, parameters, indicators, standards). • Environmental monitoring application (programmes, licensing, conditions, evidences, quality assurance). • Environmental monitoring tools (types, purpose, usefulness).

<p>prikazovanje rezultatov, veljavnost in uporabnost, Eionet).</p> <p>Aktivnosti z vplivi za okolje (pomembnejše vsebine)</p> <ul style="list-style-type: none"> • Aktivnosti z vplivi na okolje. • Vrste aktivnosti po tematikah. • Vrste aktivnosti po velikosti. • Vrste aktivnosti po trajanju. • Ocena vplivov na okolje kot mehanizem varstva okolja. • Načela in cilji presoje vplivov na okolje. • Vloga ocene vplivov na okolje v upravnih postopkih. • Praksa v svetu in v Sloveniji. • Poročilo o vplivih na okolje. • Stanje okolja. • Predhodni postopek. • Vsebinjenje. • Vrednotenje. • Vključevanje javnosti (javne razgrnitve, javne predstavitev). • Prikazovanje rezultatov, veljavnost in uporabnost poročil. • Celovita presoja vplivov na okolje in planiranje / programiranje (strateško planiranje, prostorsko – varovalno planiranje, vloga ocene vplivov na okolje pri planiranju). • Celovita presoja vplivov na okolje občinskih prostorskih načrtov z vplivi na okolje ter državnih prostorskih načrtov. • Presoja sprejemljivosti na varovana območja (pravni in vsebinski vidiki). • Omilitveni ukrepi. • Izravnalni ukrepi. • Monitoring. • Presoja vplivov na okolje. • Aktivnosti, ki lahko povzročajo pomembne vplive na okolje in zdravje. • Aktivnosti, ki lahko povzročajo manjše vplive na okolje in zdravje. • Upravni vidiki ocene vplivov na okolje (pravni red, upravni postopek, standardi, udeleženci v postopku). 	<ul style="list-style-type: none"> • Environmental information system (purpose, content, data source and data management). • Reporting and publishing environmental monitoring data (format-content, presentation of results, validity and usefulness, Eionet). <p>Activities with Environmental Impacts (important content)</p> <ul style="list-style-type: none"> • Activities with environmental impacts. • Thematic. • Gratitude. • Time frame. • Environmental Impact Assessment as a mechanism for environmental protection. • Principles and objectives of environmental impact assessment. • The role of environmental impact assessment in administrative procedures. • Worldwide and Slovenian practice. • Environmental Impact Report . • State of the Environment. • Screening. • Scoping. • Presentation to the public (public consultation, public presentation). • Presentation of results, validity and usefulness of reports. • Strategic Environmental Impact Assessment and Planning or Programming (Strategic Planning, Spatial Planning, Role of SEA in different development planning, Energy Planning, Cohesion planning, etc.). • Strategic environmental assessment for municipality land use plan. • Strategic environmental assessment for renewable sources national spatial plan. • Appropriate assessment (legal and substantive issues). • Mitigation measures. • Compensation measures. • Monitoring. • Projects with large environmental impacts.
---	---

<p>Okoljski informacijski sistemi (pomembnejše vsebine)</p> <ul style="list-style-type: none"> • Dokumentni informacijski sistem (obvladovanje dokumentacije, načrtovanje procesov, klasifikacije, izmenjava elektronskih dokumentov, integracija z ostalimi informacijskimi sistemi). • CRM informacijski sistemi. • Procesno vodenje infrastrukture, objektov in naprav komunalnih sistemov. • Geografski informacijski sistemi GIS (osnove, podatki, kartografija, standardi, pregled GIS sistemov, odprtakodni GIS sistemi, državni prostorski podatki in servisi). • Odprtakodne rešitve varovanja okolja (Merilniki okoljskih parametrov in zbiranje podatkov z IoT napravami). • Pametna mesta (upravljanje, IoT merilniki, pametna omrežja, pametni dom, obnovljivi viri energije). • Informacijski sistem komunalnega podjetja (procesi, podatkovne zbirke, napredne informacijske rešitve). • Varstvo osebnih podatkov in okoljski informacijski sistemi. 	<ul style="list-style-type: none"> • Projects with law environmental impacts. • Administrative aspects of environmental impact assessment (acquis, administrative procedure, standards, process). <p>Environmental Information Systems (important content)</p> <ul style="list-style-type: none"> • Document information system (documentation management, process planning, classifications, exchange of electronic documents, integration with other information systems). • CRM information systems. • Process management of infrastructure, facilities and utility services systems. • Geographic GIS information systems (basics, data, cartography, standards, overview of GIS systems, open source GIS systems, national spatial data and services). • Open Source Environmental Protection Solutions (Environmental Parameters and Data Collection with IoT Devices). • Smart cities (management, IoT meters, smart grids, smart home, renewables). • Information system of Utility company (processes, databases, advanced information solutions). • General Data Protection Regulation and Environmental information systems. • <p>Environmental law (important content)</p> <ul style="list-style-type: none"> • Sources of environmental law. International law. Law of the European Union. Constitution. Legislation. Executive regulations. The role of court practice and legal science in development of the environmental law. Participation of the public in framing and adopting of environmental regulations. • Horizontal regulation of the environmental law. Rules of conduct. Limit values. Environmental quality standards. Measures in case of
--	--

<p>sanacijo okoljske škode. Ekonomski in finančni instrumenti varstva okolja. Obvezne gospodarske službe varstva okolja. Nadzor.</p> <ul style="list-style-type: none"> <i>Civilnopravna in kazenska ureditev varstva okolja v Sloveniji in Evropski uniji.</i> <i>Področne ureditve varstva okolja.</i> Pravo ohranjanja narave. Pravo voda. Pravno varstvo gozdov. Pravno varstvo kmetijskih zemljišč. Pravno varstvo krajine. Živali v pravu. Pravna ureditev divjadi in lovstva. Pravna ureditev genske tehnologije z vidika prava okolja. 	<p>environmental accidents. Eco-label. System for environmental management of organisations.</p> <ul style="list-style-type: none"> <i>Programmes and plans concerning environmental protection.</i> Environmental premises. Integrated environmental impact assessment. Environmental impact assessment. Environmental protection consent. Environmental permit. Environmental monitoring and access to environmental data and information. Responsibility for prevention and remediation of environmental damage. Economic and financial environmental protection instruments. Mandatory public utility services in the field of environmental protection. Inspection control.
<p><i>Finančni vidiki upravljanja okolja (pomembnejše vsebine)</i></p> <ul style="list-style-type: none"> <i>Finančni vidiki upravljanja okolja v podjetjih</i> (varstvo okolja in dolgoročno vzdržna proizvodnja, raziskave in razvoj energetsko varčnih in okolju prijaznih proizvodov, nadomestitvene investicije v okolju bolj prijazna osnovna sredstva, ekonomski učinki klimatskih sprememb, emisijski certifikati in določanje njihove vrednosti na trgu, finančni instrumenti/derivativi na emisijske certifikate, dinamika emisijske cene, deterministični in stohastični ravnotežnostni modeli, poročanje o onesnaževanju okolja, kvaliteta podatkov in nadzor). <i>Finančne investicije v varstvo okolja in ohranjanje narave</i> (odnos potrošnikov do varstva okolja, skrb podjetja za okolje in tveganje ugleda, zavajanje potrošnikov pri določanju lastnosti izdelkov v odnosu do varstva okolja, organizacija proizvodnje in okolje kot omejitveni faktor, oblikovanje in proizvodnja okolju prijaznih izdelkov). <i>Financiranje projektov za varstvo okolja</i> (bančni okoljski produkti in storitve, evropsko financiranje in pogoji, krediti za investicije s pozitivnim vplivom na okolje, krediti s subvencionirano obrestno mero, okoljske subvencije, nišni trgi in mikrokrediti, drugo okoljsko financiranje, presojanje investicijskih 	<p><i>Protection of environment in civil and criminal law of the Republic of Slovenia and of the European Union.</i> Topical regulations of environmental protection. Nature conservation law. Water law. Legal protection of forests. Legal protection of agricultural land. Legal protection of landscape. Animals in law. Legal regulation of game and hunting. Legal protection of mineral resources. Legal protection of soil. Legal regulation of gene technology from the environmental law aspect.</p> <p><i>Financial aspects of management with environment (important content)</i></p> <ul style="list-style-type: none"> <i>Financial aspects of environment management in companies</i> (protection of environment in long-term sustainable production, research and development of energy saving and environmental friendly products, replacement investments into more environmental friendly assets, economic impacts of climate changes, emission certificates and determination of their price on the market, financial instruments/derivatives on emission certificates, dynamics of emission price, deterministic and stochastic equilibrium models, environmental

<p>projektov s pozitivnim vplivom na okolje, vloga bank in razvojnih bank pri odobravanju kreditov za projekte z vplivom na okolje).</p> <ul style="list-style-type: none"> • <i>Okoljske nesreče in finančne posledice za podjetja kot povzročitelje</i> (klasifikacija okoljskih nesreč, merjenje škode, finančne posledice/kazni za podjetja, študije primerov in poslovne zgodovine). 	<p>reporting, data quality and supervision).</p> <ul style="list-style-type: none"> • <i>Financial investments in environment protection and nature conservation</i> (perception of consumers to protection of environment, environmental concern of the company and reputation risk, misleading of consumers with properties of products in relation to environment protection, organization of production and environment as restricting factor, designing and production of environmental friendly products).
<p><i>Strokovni tuji jezik (pomembnejše vsebine)</i></p> <ul style="list-style-type: none"> • <i>Govorjenje in poslušanje</i> (izražanje mnenja na podlagi preučenega materiala, pogovor, argumentiranje, poročanje o vsebinah s področja varstva okolja in trajnostnega razvoja z uporabo ustrezne terminologije; razumevanje slušnih vsebin s področja varstva okolja in varstva narave: <i>ocena vplivov na okolje, ocena vplivov kot mehanizem varstva okolja, poročilo o vplivih na okolje, rešitve za ohranjanje in izboljšanje kakovosti okolja, ocena vplivov na okolje in planiranje, rešitve za ohranjanje in izboljšanje kakovosti okolja, upravni vidiki ocene vplivov na okolje</i>). • <i>Branje in pisanje</i> (razumevanje pisnih besedil s področja varstva okolja in varstva narave; pisno komuniciranje: poslovno pismo, dopisi, poročila, e-pošta, povzetki, citiranje, eseji, ključne besede). 	<ul style="list-style-type: none"> • <i>Financing of projects for environment protection</i> (environmental banking products and services, European financing and conditions, loans for investments with a positive impact on environment, loans with subsidized interest rate, environmental subsidies, niche markets and microcredits, other environmental financing, judgement of investment projects with positive impact on environment, role of banks and development banks at granting loans for projects with impact on environment). • <i>Environmental accidents and financial consequences for companies as drivers</i> (classification of environmental accidents, measurement of damage, financial consequences/penalties for companies, case studies from business history).

Professional English (important content)

- *Speaking and listening* (expressing opinion based on the studied material, discussion, argumentation, reporting on environmental protection and sustainable development using the appropriate terminology; understanding conversations in the fields of environmental protection and nature protection: *Environmental Impact Assessment, Impact assessment as a mechanism for environmental protection, Environmental Impact Report, Environmental Impact Assessment and Planning, Environmental Impact*

	<p><i>Assessment and Planning, Solutions for maintaining and improving the quality of environment, Administrative aspects of environmental impact assessment).</i></p> <ul style="list-style-type: none"> • <i>Reading and writing</i> (understanding written texts in the field of environmental protection and nature protection; written communication: business letters, memos, reports, e-mails, summaries, quotations, essays, key words).
--	--

Temeljna literatura in viri/Readings:

/

Cilji in kompetence:

Učna enota prispeva k razvoju naslednjih splošnih in specifičnih komponent:

- uporaba teoretičnega znanja, pridobljenega med študijem v neposrednem delovnem okolju,
- poglavljanje znanja,
- pridobivanje novega znanja,
- spoštovanje in upoštevanje delovne discipline in odgovorno opravljanje zaupanih nalog,
- poznavanje, razumevanje in refleksija kompleksnosti strokovnih in družbenih vlog zaposlenih na različnih področjih upravljanja z okoljem,
- razumevanje in upoštevanje raznolikosti potreb posameznika pri načrtovanju, organizaciji, koordinaciji pomoči in izvajanju upravljanja z okoljem,
- usposobljenost za prevzemanje odgovornosti pri profesionalnem delu,
- poznavanje, priznavanje in spoštovanje načel profesionalne etike in relevantne zakonodaje,
- sposobnost vsestranskega in sistematičnega prilagajanja glede na želje, potrebe, možnosti in druge individualne okoliščine,
- sposobnost vključevanja standardov kakovosti s kritičnim ocenjevanjem, interpretacijo in sintezo informacij,
- sposobnost učinkovitega komuniciranja,

Objectives and competences:

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

- the use of theoretical knowledge gained during the study in the direct work environment,
- broadening of knowledge,
- gaining new knowledge,
- familiarisation with and adoption of the business culture and the rules of conduct,
- knowing, understanding and reflecting on the complexity of professional and social roles of employees in various fields of environmental management,
- understanding and considering the diversity of needs of individuals in planning, organizing, coordinating assistance and implementation of Environmental Management,
- the ability to take responsibility in professional work,
- knowledge, appreciation and respect for the principles of professional ethics and relevant legislation,
- the ability to adapt to a comprehensive and systematic treatment to the wishes, needs, opportunities, and other individual circumstances,
- the ability to integrate quality standards with critical evaluation, interpretation and synthesis of information,
- the ability to communicate effectively,

<ul style="list-style-type: none"> • usposobljenost za timsko delo in interdisciplinarno sodelovanje, • usposobljenost za uporabo raziskovalnih metod, postopkov in procesov, • usposobljenost za varovanje zdravja in okolja, lastno varnost in varnost drugih, • odgovoren odnos do razvoja lastne profesionalne podobe. 	<ul style="list-style-type: none"> • realizing that the goal of the patient's well-being and quality of life can be achieved by combining efforts of interprofessional cooperation between various operators, • qualification for teamwork and interdisciplinary collaboration, • qualification for preservation of health and environment, one's own safety and safety of other people, • responsible attitude towards one's own professional development.
--	---

Predvideni študijski rezultati:

Študent/Studentka:

- je usposobljen za ustrezeno pripravo na delo in uporabo osebnih zaščitnih sredstev,
- prepozna znanja in spretnosti za zagotavljanje varnega okolja,
- razvije potrebne veštine za sodelovanje pri izvajanju upravljanja okolja v skladu s kompetencami,
- pridobi sistematično znanje o upravljanju z okoljem,
- povezuje praktična znanja iz različnih področij upravljanja z okoljem v skladu s študijskim programom,
- se usposobi za sporazumevanje in argumentirano razpravo v stroki in med strokami,
- je avtonomen pri strokovnem delu,
- je usposobljen za etično refleksijo in zavezanost profesionalni etiki,
- napiše poročilo o praktičnem izobraževanju.

Intended learning outcomes:

Students:

- are qualified to adequately prepare for work and the use of personal protective equipment,
- recognize knowledge and skills to ensure a safe environment,
- develop the necessary skills to participate in the implementation of Environmental Management in accordance with their competences,
- acquire systematic knowledge of Environmental Management,
- combine practical knowledge from various fields of environmental management in accordance with the study program,
- are able to communicate and reasonably debate within the profession and between professions,
- are autonomous in professional work,
- are qualified to ethical reflexion and dedication to professional ethics,
- write a report on practical training.

Metode poučevanja in učenja:

- vodeno in samostojno individualno delo študenta,
- mentorski pristop.

Learning and teaching methods:

- guided and independent individual work of students,
- mentorship approach.

Načini ocenjevanja:	Delež (v %) Weight (in %)	Assessment:
<p>Način:</p> <ul style="list-style-type: none"> • praktično izobraževanje ocenita mentor in nosilec praktičnega izobraževanja z ocenama uspešno/neuspešno • študent je ocenjen z oceno uspešno v primeru, da je opravil vse z učnim načrtom po vsebini in obsegu predpisane obveznosti in sta ga tako ocenila oba ocenjevalca 	<p>100 % uspešno/successful</p>	<p>Types:</p> <ul style="list-style-type: none"> • the practical education is graded by the mentor and the teacher responsible for practical education with the <i>successful/unsuccessful</i> grade • students are graded with the 'successful' grade when they have met all the necessary objectives, prescribed by the syllabus in terms of their content and scope, and when they are positively graded by both the mentor and the teacher