

UČNI NAČRT PREDMETA/COURSE SYLLABUS

Predmet:	Geohazard in varstvo pred naravnimi nesrečami
Course title:	Geohazard and Protection from Natural Disasters

Študijski programi in stopnja	Študijska smer	Letnik	Semestri
Geologija, druga stopnja, magistrski	Aplikativna geologija (modul)	1. letnik, 2. letnik	Zimski

Univerzitetna koda predmeta/University course code: 719

Predavanja	Seminar	Vaje	Klinične vaje	Druge oblike študija	Samostojno delo	ECTS
30	30	15	0	0	75	5

Nosilec predmeta/Lecturer: Barbara Čenčur Curk

Vrsta predmeta/Course type: Izbirni / Elective

Jeziki/Languages:	Predavanja/Lectures:	Angleščina, Slovenščina
	Vaje/Tutorial:	Angleščina, Slovenščina

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

Prerequisites:

Znanje osnov geologije, geologija okolja, hidrologije, hidrogeologije, inženirske geologije in geofizike.	Knowledge of Basics of Geology, Hydrology, Hydrogeology, Engineering Geology and Geophysics.
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Vsebina:

Content (Syllabus outline):

Uvod v geookolje Odnos človeka do narave Pregled evropske in slovenske okoljske zakonodaje ter zakonodaje s področja varstva pred naravnimi nesrečami Hidrometeorološki hazard (suša, poplave, toča, tornado...) Geofizikalni hazard (potresi, vulkani, plazovi in podori, posedanje, kraške udornice, preperevanje, hidrogeokemijski vpliv na podzemne objekte in temelje, obalna erozija) Karte geohazarda Upravljanje geohazarda in tveganja (možnost oz. nevarnost pred dogodkom, dogodek in postopki sankcije, ki nastopijo med ali po dogodku) Monitoring (tehnike, načrtovanje)	Introction to geoenvironment Relationship between humankind and nature Review of the European and Slovenian environmental legislation and legislation in the field of protection against natural disasters Hydrometeorological hazard (drought, floods, hail, tornadoes ...) Geophysical hazard (earthquakes, volcanoes, landslides and rock falls, subsidence, karst sinkholes, weathering, hydrogeochemical impact on underground structures and foundations, coastal erosion) Geohazard maps Management of geohazard and risk (possibility or danger before the event, event and remediation procedures that occur during or after the event) Monitoring (techniques and design)
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Temeljna literatura in viri/Readings:

HYNDMAN, D., HYNDMAN, D., 2014, Natural Hazards & Disasters, Brooks/Cole Cengage Learning, 555p. ALCÁNTARA-AYALA, I., GOUDIE, A., 2010, Geomorphological hazards and disaster prevention, Cambridge University Press, 291p. BRYANT, E., 2007, Natural hazards, Cambridge University Press, 312p. BOBROVSKY, P. T., 2013, Encyclopedia of Natural Hazards, Springer, 1116p.

<p>Cilji in kompetence:</p> <p>CILJI: Študent se seznani z odnosom človeka do narave, tipi geohazarda, upravljanjem, preprečevanjem, sanacijo in monitoringom geohazarda ter z zakonodajo na tem področju</p> <p>KOMPETENCE: Poznavanje geoloških mehanizmov, ki povzročajo različne tipe geohazarda, ter mehanizmov njihovega razširjanja v prostoru. Poznavanje postopkov raziskav in obdelav s katerimi se določijo možna nevarna območja in sanirajo že aktivna območja. Poznavanje sistemov za monitoring in obveščanje. Preventivni ukrepi in zakonodaja, izdelava kart geohazarda.</p>	<p>Objectives and competences:</p> <p>OBJECTIVES: Students get acquainted with the relationship between humankind and nature, geohazard types, management, prevention, rehabilitation and monitoring of geohazard, as well as legislation in this area.</p> <p>COMPETENCES: Knowing the geological mechanisms that cause different types of geohazard and the mechanisms of their distribution in space. Knowledge of research procedures and processes which determine the possible danger areas and remediation of already active areas. Knowledge of systems for monitoring and warning. Preventive measures and legislation, elaboration of geohazard map.</p>
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<p>Predvideni študijski rezultati:</p> <p>Sposobnost napovedovanja, preprečevanja, preiskovanja in zmanjševanja posledic naravnih nesreč.</p>	<p>Intended learning outcomes:</p> <p>Capacity of forecasting, prevention and research of natural disasters and reducing the impact of natural disasters.</p>
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<p>Metode poučevanja in učenja:</p> <p>Predavanja (30 ur) z uporabo prezentacij. Vaje potekajo kot vodene seminarske vaje (30 ur) in kot vodene kabinetne vaje (15 ur).</p>	<p>Learning and teaching methods:</p> <p>Lectures (30 hours) by using presentations. Rehearsals will take place as tutorials (30 hours) and as a cabinet-guided exercises (15 hours).</p>
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Načini ocenjevanja:	Delež/Weight	Assessment:
Pisni izpit: teoretična vprašanja	45,00 %	Written exam: theoretical questions
Seminarji (2): 25% + 25%	50,00 %	Seminar work (2): 25% + 25%
Prisotnost na predavanjih in vajah	5,00 %	The presence at lectures and tutorials
Pogoji za pristop k izpitu: vsaj 75% prisotnost na predavanjih in 100 % prisotnost na vajah, pozitivno opravljene vaje in seminarji (predstavitev, naloga) in seminarske vaje. Ocenjevalna lestvica: 51-60% (6); 61-70% (7); 71-80% (8); 81-90% (9); 91-100% (10) ob upoštevanju Statuta UL in fakultetnih pravil.		Conditions for the exam: at least 75% attendance at lectures and 100 % attendance at tutorials, successfully done tutorials and seminars (presentation and paper) and tutorials. Grading scale: 51-60% (6); 61-70% (7); 71-80% (8); 81-90% (9); 91-100% (10) according to the Statute of UL and faculty rules.

<p>Reference nosilca/Lecturer's references:</p> <p>ČENČUR CURK, Barbara. Impact of fertilization on water resources in karst, example of research field site Sinji Vrh. Acta agriculturae Slovenica, 2014, vol. 103/2, str. 203-211, doi: 10.14720/aas.2014.103.2.5.</p> <p>SOUVENT, Petra, VIŽINTIN, Goran, CELARC, Sašo, ČENČUR CURK, Barbara. Ekspertni sistem za podporo odločanju na aluvialnih telesih podzemnih voda Slovenije = An expert system as a support to the decision making process for groundwater management of alluvial groundwater bodies in Slovenia. Geologija, 2014, vol. 57/2, str. 245-250, doi: 10.5474/geologija.2014.021.</p> <p>LESJAK, Polonca, ČENČUR CURK, Barbara. Threats to local drinking water in the municipality of Ljubljana. Sanitarno inženirstvo, 2012, vol. 6/1, str. 58-77.</p>
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