UČNI NAČRT PREDMETA/COURSE SYLLABUS

Predmet:	Recentna sedimentacijska okolja
Course title:	Environmental Sedimentology

Študijski programi in stopnja	**Študijska smer**	**Letnik**	**Semestri**
Geologija, prva stopnja, univerzitetni	Ni členitve (študijski program)	2. letnik	

Univerzitetna koda predmeta/University course code: 11291

Predavanja	**Seminar**	**Vaje**	**Klinične vaje**	**Druge oblike študija**	**Samostojno delo**	**ECTS**
30	30	15	0	15	90	6

Nosilec predmeta/Lecturer: Andrej Šmuc, Mirijam Vrabec, Nastja Rogan Šmuc

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:**
Pogoji za vključitev v delo je vpis v 2. ali 3. letnik študija geologije. Priporočljivo - opravljeni izpiti iz Geokemije in Sedimentne petrologije za pristop k izpitu.	Condition for inclusion in the work is inscription to the 2nd or 3rd academic year. Recommended - passed exams from Geochemistry and Sedimentary petrology to take an exam.

Vsebina:	**Content (Syllabus outline):**
Uvod v recentna sedimentacijska okolja	Introduction to environmental sedimentology
Gorska okolja	Mountain environments
Fluvialna okolja	Fluvial environments
Jezerska okolja	Arid environments
Puščavska okolja	Urba environments
Deltna in estuarska okolja	Deltaic and estuarine environments
Obalna okolja zmernih in tropskih klimatskih pasov	Temperate and tropical costal environments
Okolja kontinentalnega šelfa	Continental shelf environments

Temeljna literatura in viri/Readings:

PERRY, C. & TAYLOR, K., 2007: Environmental Sedimentology, Blackwell Publishing, UK, 441 p.
VAUGHAN, D. J. & WOGELIUS, R. A. (Eds.), 2000: Environmental mineralogy : Eötvös University Press, Budapest, 434 p.

Cilji in kompetence:	**Objectives and competences:**
CILJI: Študenti se seznanijo z recentnimi sedimentacijskimi okolji, procesi in dinamiko nastajanja sedimentov v njih. Razumejo lastnosti recentnih sedimentov ter obseg antropogenih in okoljskih vplivov na recentni sedimentacijski sistem. KOMPETENCE: Študenti so sposobni prepoznati obseg in pomembnost recentnih sedimentacijskih okolij, identificirati možne nevarne antropogene in klimatske	OBJECTIVES: Students are acquainted with recent sedimentary environments, processes and dynamics of sediment formation. They understand the characteristics of recent sediments and the extent of anthropogenic and environmental impacts of recent sedimentary system. COMPETENCES: Students are able to identify the scope and importance of recent depositional environments and to identify potential dangerous anthropogenic and

vplive na recentno sedimentacijo, izvajati monitoring onesnaženja recentnih sedimentov ter izdelati potrebni sanacijski načrt.	climatic influences on recent sedimentation. They are able to perform monitoring of contamination of recent sediments and make the necessary recovery plan.

Predvideni študijski rezultati:	**Intended learning outcomes:**
Študent pozna recentna sedimentacijska okolja in razume procese, ki delujejo v njih. S pomočjo pridobljenih podatkov zna interpretirati potencialna onesnaženja ter predlagati ustrezne rešitve. Zna izbrati in uporabiti ustrezne analitske tehnike ter ustrezno obdelavo podatkov. Razume fizikalne, kemične in biološke interakcije med recentnimi sedimenti in okoljnimi ekosistemi.	Students are familiar with recent sedimentary environments and understand the processes that operate within them. With the help of the data they are able to interpret the potential contamination and to propose appropriate solutions. Students know how to select and use appropriate analytical techniques and appropriate data processing. They understand the physical, chemical and biological interactions of recent sediments and the ambient ecosystems.

Metode poučevanja in učenja:	**Learning and teaching methods:**
Predavanja, seminarji, vaje in 2 dni terenskega dela. V okviru predmeta študenti izdajo seminarsko nalogo in terensko poročilo.	Lectures, seminars, practical work and 2 days of fieldwork. Within the Course students will prepare seminar work and fieldwork report.

Načini ocenjevanja:	**Delež/Weight**	**Assessment:**
Pisni izpit in/ali oddane domače naloge	60,00 %	Written exam and/or given homework
Seminarska naloga	25,00 %	Seminar work
Poročilo terenskega dela	10,00 %	Fieldwork report
Aktivno sodelovanje pri predavanjih	5,00 %	Active participation in lectures

Reference nosilca/Lecturer's references:

ROŽIČ, Boštjan, ŠMUC, Andrej. Gravity-flow deposits in the Toarcian Perbla formation (Slovenian basin, NW Slovenia). Riv. ital. paleontol. stratigr., 2011, vol. 117, no. 2, str. 283-294.

ŠMUC, Andrej, ROŽIČ, Boštjan. Tectonic geomorphology of the Triglav Lakes Valley (easternmost Southern Alps, NW Slovenia). Geomorphology (Amst.). [Print ed.], 2009, issue 4, vol. 103, str. 597-604, doi: 10.1016/j.geomorph.2008.08.005.

ROŽIČ, Boštjan, KOLAR-JURKOVŠEK, Tea, ŠMUC, Andrej. Late Triassic sedimentary evolution of Slovenian Basin (eastern Southern Alps): description and correlation of the Slatnik Formation. Facies, 2009, vol. 55, no. 1, str. 137-155, doi: 10.1007/s10347-008-0164-2.

ROGAN, Nastja, DOLENEC, Tadej, SERAFIMOVSKI, Todor, JAĆIMOVIĆ, Radojko, DOLENEC, Matej. Major and trace elements in rice seeds from Kočani field, Macedonia. Acta chim. slov., [Tiskana izd.], 2007, vol. 54, no. 3, str. 623-634.

DOLENEC, Tadej, LOJEN, Sonja, KNIEWALD, Goran, DOLENEC, Matej, ROGAN, Nastja. Nitrogen stable isotope composition as a tracer of fish farming in invertebrates Aplysina aerophoba, Balanus perforatus and Anemonia sulcata in central Adriatic. Aquaculture, [Print ed.], 2007, vol. 262, is. 2-4, str. 237-249.

ROGAN ŠMUC, Nastja, DOLENEC, Tadej, SERAFIMOVSKI, Todor, TASEV, Goran, DOLENEC, Matej, VRHOVNIK, Petra. Heavy metal characteristics in Kočani Field plant system (Republic of Macedonia). Environmental geochemistry and health, 2012, vol. 34, iss. 4, str. 513-526.

VRABEC, Mirijam, PREISINGER, Davo. Kristali halita iz slovenskih solin in o evaporitih na splošno. V: JERŠEK, Miha (ur.). Mineralna bogastva Slovenije, (Scopolia, Suppl., 3). Ljubljana: Prirodoslovni muzej Slovenije: = Slovenian Museum of Natural History, 2006, str. 448-453.

JANAK, Marian, CORNELL, David, FROITZHEIM, Nikolaus, HOOG, J.C.M. De, BROSKA, Igor, VRABEC, Mirijam, HURAI, Vratislav. Eclogite-hosting metapelites from the Pohorje Mountains (Eastern Alps): P-T evolution, zircon geochronology and tectonic implications. European journal of mineralogy, 2009, vol. 21, no. 6, str. 1191-1212, doi: 10.1127/0935-1221/2009/0021-1966.

ČAR, Jože, DOBNIKAR, Meta, HERLEC, Uroš, JERŠEK, Miha, REŽUN, Bojan, SKOBE, Simona, VRABEC, Mirijam, ZUPAN HAJNA, Nadja, ZUPANČIČ, Nina. Selected ore deposits, igneous and metamorphic rocks from Eastern Alps, Slovenia : IMA2010 field trip guide SI1, (Acta Mineralogica-Petrographica, 26). Szeged: Depart. of Mineralogy, Geochemistry and Petrology, Univ. of Szeged, 2010. 24 str.