

UČNI NAČRT PREDMETA / COURSE SYLLABUS

Predmet:	RAZISKOVALNO DELO
Course Title:	RESEARCH WORK

Študijski program in stopnja Study Programme and Level	Študijska smer Study Field	Letnik Academic Year	Semester Semester
DR Kemijske znanosti, 3. stopnja	/	4.	7. in 8.
Doctoral programme in Chemical Sciences, 3 rd Cycle	/	4 th	7 th and 8 th

Vrsta predmeta / Course Type: obvezni / Mandatory

Univerzitetna koda predmeta / University Course Code:

Predavanja Lectures	Seminar Seminar	Vaje Tutorial	Klinične vaje Work	Druge oblike študija	Samost. delo Individual Work	ECTS
		/	/	825	825	55

Nosilec predmeta / Lecturer: mentor, somentor / Supervisor, co-supervisor

Jeziki / Languages:

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

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

Vpis v 4. letnik DŠP Kemijske znanosti.

Prerequisites:

Enrolment into the 4th year of the doctoral programme Chemical Sciences.

Vsebina:

Samostojno znanstveno-raziskovalno delo študenta pod vodstvom mentorja in morebitnega somentorja in ob upoštevanju dosedanjih znanstvenih dognanj na področju tematike doktorske disertacije.

Content (Syllabus outline):

Independent scientific research work conducted by the student under the supervision of the supervisor and co-supervisor (if appointed) and in light of the state-of-the-art in the field of the doctoral dissertation.

Temeljna literatura in viri / Readings:

Glede na naravo individualnega raziskovalnega dela niso predvideni.

According to the nature of the individual research work they are not foreseen.

Cilji in kompetence:

Študent zaključi z znanstveno-raziskovalnim delom ter napiše doktorsko disertacijo in jo

Objectives and Competences:

The student completes the scientific research work, writes his doctoral dissertation and

odda v oceno Komisiji za spremljanje doktorskega študenta.

Pred oddajo mora zadostiti pogojem, ki so določeni s Pravilnikom o doktorskem študiju Univerze v Ljubljani in Pravilnikom o doktorskem študiju na Fakulteti za kemijo in kemijsko tehnologijo.

submits it to the Doctoral Studies Committee for evaluation.

Prior to submission, he must meet the requirements set out in the Rules and regulations for doctoral studies at the University of Ljubljana and the Rules and regulations for doctoral studies at the Faculty of Chemistry and Chemical Technology.

Predvideni študijski rezultati:

Znanje in razumevanje

Študent razume teoretične osnove metod, ki jih uporablja pri svojem delu ter zna eksperimentalne rezultate ustrezno interpretirati ter kritično vrednotiti.

Študent pozna literaturo na širšem področju predvidene tematike doktorske disertacije in se sproti seznanja z najnovejšimi odkritji na tem področju.

Uporaba

Študent je sposoben samostojno načrtovati in izvajati eksperimente v okviru svoje doktorske disertacije ter interpretirati rezultate eksperimentov.

Študent je sposoben na osnovi lastnih eksperimentalnih rezultatov napisati znanstveni članek, v katerem rezultate predstavi v skladu z ustaljenimi normami področja raziskav.

Refleksija

Študent je sposoben svoje lastno raziskovalno delo povezati s teoretičnimi osnovami, ki jih je spoznal v prejšnjih stopnjah izobraževanja ter z aktualnimi dognanji s področja raziskav.

Prenosljive spretnosti

Ustno in pisno poročanje ter predstavljanje rezultatov lastnega raziskovalnega dela. Sposobnost individualnega kot tudi timskega dela. Uporaba ustreznih računalniških programov za analizo podatkov in njihovo predstavitev.

Intended Learning Outcomes:

Knowledge and Comprehension

The student understands the theoretical basis of the methods he uses in his research work and is able to correctly interpret and critically evaluate experimental results.

The student is familiar with the current state-of-the-art in the broader scientific field of his doctoral research work and is up-to-date with the latest developments.

Application

The student is able to independently design and conduct experiments as part of his doctoral dissertation and interpret the results.

Based on his own experimental results, the student is able to write a scientific article in which he presents the results in accordance with established norms in the field of research.

Analysis

The student is able to relate his own research to the theoretical principles learned at earlier levels of education and to the state-of-the-art in his scientific field.

Skill-transference Ability

Oral and written reporting. Presentation of the results of one's own research work. Ability to work independently as well as part of a team. Use of appropriate computer programs for data analysis and presentation.

Metode poučevanja in učenja:

Individualno raziskovalno delo študenta v sodelovanju z mentorjem in somentorjem.

Learning and Teaching Methods:

Individual research work of the student supervised by the supervisor and co-supervisor.

Delež (v %) /

Načini ocenjevanja:Weight (in %) **Assessment:**

Posebno preverjanje znanja se ne predvideva. Napredek ocenita mentor in somentor.		Examinations are not foreseen. Progress is monitored by the supervisor and co-supervisor.
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Reference nosilca / Lecturer's references:

Mentor in somentor morata izpolnjevati pogoje za mentorstvo v skladu s Pravilnikom o doktorskem študiju Univerze v Ljubljani in Pravilnikom o doktorskem študiju na Fakulteti za kemijo in kemijsko tehnologijo.
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The supervisor and co-supervisor must fulfill the supervision criteria defined in the Rules and regulations for doctoral studies at the University of Ljubljana and the Rules and regulations for doctoral studies at the Faculty of Chemistry and Chemical Technology.
