

UČNI NAČRT PREDMETA / COURSE SYLLABUS

Predmet:	Regulativa materialov
Course title:	Regulations of materials

Študijski program Study programme and level	Študijska smer Study field	Letnik Academic year	Semester Semester
Inženiring in avtomobilska industrija Doktorski študij	program nima smeri	prvi	-
Engineering and Automotive Industry Doctor degree study	The program has no study fields	First	-

Vrsta predmeta / Course type Izbirni / Optional

Univerzitetna koda predmeta / University course code: DR_31024

Predavanja Lectures	Seminar Seminar	Sem. vaje Tutorial	Lab. vaje Laboratory work	Teren. vaje Field work	Samost. delo Individ. work	ECTS
60	-	30	-	-	180	10

Nosilec predmeta / Lecturer: doc. dr. Igor Simonič

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

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

Prerequisites:

– Vpis v 1. letnik doktorskega študija.	– Enrollment in the first year of doctoral study.
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Vsebina:

Content (Syllabus outline):

<ul style="list-style-type: none"> – Uvod: pomen spoštovanja zakonske regulative – Regulativa o materialih v EU: <ul style="list-style-type: none"> ○ Uredba o registraciji, evalvacija, avtorizaciji in omejevanju kemikalij (REACH, Uredba (ES) št. 1907/2006) ○ Uredba o razvrščanju, pakiranju 	<ul style="list-style-type: none"> – Introduction: the importance of respecting legal regulations – Regulation on materials in the EU: <ul style="list-style-type: none"> ○ Regulation on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH, Regulation (EC) No. 1907/2006) ○ Regulation on classification, packaging
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<p>in označevanju nevarnih snovi in zmesi (CLP, Uredba (ES) št. 1272/2008)</p> <ul style="list-style-type: none"> ○ Uredba o soglasju po predhodnem obveščanju (PIC, Uredba (ES) št. 649/2012) ○ Uredba o fluoriranih toplogrednih plinih (Uredba (ES) št. 517/2014) ○ Uredba o snoveh, ki tanjšajo ozonski plašč (Uredba (ES) št. 1005/2009) <p>– Regulative o materialih v RS:</p> <ul style="list-style-type: none"> ○ Zakon o kemikalijah (Uradni list RS, št. 110/03 – uradno prečiščeno besedilo, 47/04 – ZdZPZ, 61/06 – ZBioP, 16/08, 9/11 in 83/12 – ZFFS-1) ○ Pravilnik o postopku za pridobitev dovoljenja za opravljanje dejavnosti proizvodnje nevarnih kemikalij, prometa z nevarnimi kemikalijami, skladiščenja nevarnih kemikalij ali uporabe nevarnih kemikalij (Uradni list RS, št. 74/11) ○ Pravilnik o sporočanju podatkov za kemikalije (Uradni list RS, št. 35/11, 49/13, 18/15, 69/15 in 97/15) ○ Pravilnik o tehničnih in organizacijskih ukrepih za skladiščenje nevarnih kemikalij (Uradni list RS, št. 75/09) ○ Pravilnik o omejevanju uporabe določenih nevarnih snovi v električni in elektronski opremi (Uradni list RS, št. 102/12, 20/14, 57/14, 53/15 in 60/16) ○ Uredba o ravnanju z baterijami in akumulatorji ter odpadnimi baterijami in akumulatorji (Uradni list RS, št. 3/10, 64/12, 93/12 in 103/15) <p>– Orodja in uporaba le-teh za izvajanje zahtev regulative:</p> <ul style="list-style-type: none"> ○ IUCLID ○ QSAR Toolbox 	<p>and labeling of dangerous substances and mixtures (CLP, Regulation (EC) No 1272/2008)</p> <ul style="list-style-type: none"> ○ Prior Informed Consent Regulation (PIC, No 649/2012) ○ Regulation on fluorinated greenhouse gases (Regulation (EU) No 517/2014) ○ Regulation on substances that deplete the ozone layer (Regulation (ES) No 1005/2009) <p>– Regulation on materials in the RS:</p> <ul style="list-style-type: none"> ○ Chemicals Act (Uradni list RS, št. 110/03 – uradno prečiščeno besedilo, 47/04 – ZdZPZ, 61/06 – ZBioP, 16/08, 9/11 in 83/12 – ZFFS-1) ○ Rules on the authorization procedure for the operators involved in the production of dangerous substances, trade in, storage or use of dangerous chemicals (Uradni list RS, št. 74/11) ○ Rules on the communication of information for chemicals (Uradni list RS, št. 35/11, 49/13, 18/15, 69/15 in 97/15) ○ Rules on technical and organizational measures for the storage of hazardous chemicals (Uradni list RS, št. 75/09) ○ Rules on the restriction of the use of certain hazardous substances in electrical and electronic equipment (Uradni list RS, št. 102/12, 20/14, 57/14, 53/15 in 60/16) ○ Decree on the management of batteries and accumulators and waste batteries and accumulators (Uradni list RS, št. 3/10, 64/12, 93/12 in 103/15) <p>– Tools and how to use them to implement the requirements of regulations:</p> <ul style="list-style-type: none"> ○ IUCLID ○ QSAR Toolbox <p>– How to prepare for the implementation of the requirements</p> <p>– Practical examples</p>
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<ul style="list-style-type: none"> – Kako se pripravimo na izvajanje zahtev – Praktični primeri 	
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Temeljna literatura in viri / Readings:

<ul style="list-style-type: none"> – Pravni teksti uredb EU / Legal text of EC regulations: http://eur-lex.europa.eu/ – Pravni teksti zakonodaje RS / Legal text of RS legislation: http://www.pisrs.si/Pis.web/ – Simonič, Igor. Izvajanje uredbe CLP v farmacevtski industriji. Primerjava razvrščanja in označevanja nekaterih farmacevtskih učinkovin, Tehnologija v dobi trajnostnega razvoja, zbornik povzetkov, Novo mesto: Fakulteta za industrijski inženiring, 2016, str. 25-26. Dostopno na / accessible via http://rii.fini-unm.si/wp-content/uploads/2016/04/Zbornik-povzetkov-konference_FINAL-WEB.pdf – Program / software IUCLID: http://iuclid.echa.europa.eu/

Priporočljiva literatura / Recommended Textbooks

<ul style="list-style-type: none"> – Gradivo / other texts: https://echa.europa.eu/sl/support
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Cilji in kompetence:

<p>Cilji</p> <ul style="list-style-type: none"> – Pridobiti znanje o zakonodajnih pogojih kemijske zakonodaje za uporabo materialov/surovin in nekaterih izdelkov v industriji. – Spoznati temeljne vire podatkov o materialih/surovinah. – Spoznati nekatera orodja in pristope za izvajanje prijav dejavnosti z materiali/surovinami.

<p>Kompetence</p> <ul style="list-style-type: none"> – Prepoznati, katere pogoje morajo zadostiti v podjetju za učinkovito izvajanje zahtev kemijske zakonodaje pri razvojno-raziskovalni in proizvodni dejavnosti podjetja. – Poznati temeljne postopke in procese za pridobivanje podatkov za izvajanje zahtev kemijske zakonodaje. – Poznati temeljne postopke in procese za izpolnjevanje zahtev kemijske zakonodaje v podjetjih.

Objectives and competences:

<p>Objectives</p> <ul style="list-style-type: none"> – Gain knowledge about the legal conditions of chemical legislation for the use of materials/raw materials and certain products in the industry. – To recognize the fundamental sources of information on materials/raw materials. – To recognize some of the tools and approaches for the implementation of applications on activities with materials/raw materials.
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<p>Competences</p> <ul style="list-style-type: none"> – Identify the conditions which must be satisfied in the company to effectively implement the requirements of chemical legislation in the research and development and production activities of the company. – Know the basic procedures and processes for data acquisition requirements for the implementation of chemicals legislation. – Know the basic procedures and processes to meet the requirements of chemical legislation in enterprises.
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Predvideni študijski rezultati:

Znanje in razumevanje:

Intended learning outcomes:

Knowledge and understanding:

<ul style="list-style-type: none"> – Pogojev za izpolnjevanje zahtev kemijske zakonodaje za nemoteno delovanje podjetja na področju dela z materiali/surovinami. – Spoznati zakonske omejitve pri delu z materiali/surovinami. – Sposobnost uporabe pridobljenega teoretičnega znanja v praksi. – Avtonomnost pri raziskovalnem in strokovnem delu. – Zavezanost profesionalni etiki. – Sposobnost oblikovanja in implementacije izvernih znanstvenih rešitev danih problemov in priložnosti na področju tehnike. – Sposobnost predstavitve pridobljenih znanstvenih izsledkov v obliki publikacij v mednarodni znanstveni periodiki. 	<ul style="list-style-type: none"> – Conditions for compliance with the requirements of the chemical legislation for the smooth operation of the company in the field of working with materials/raw materials. – To recognize the legal constraints when working with materials/raw materials. – Ability to use theoretical knowledge in practice. – Autonomy in research and professional work. – Commitment to professional ethics. – Ability of designing and implementing unique scientific solution given to problems and opportunities in the field of art. – Ability public presentation of scientific results in the form of publications in international scientific journals.
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Metode poučevanja in učenja:

Learning and teaching methods:

<ul style="list-style-type: none"> – predavanja – individualno in skupinsko delo s študenti v obliki konzultacij – projektna naloga s praktičnim primerom 	<ul style="list-style-type: none"> – lectures – individual and group work with students in the form of consultations – project work with a practical example
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Načini ocenjevanja:

**Delež (v %) / Assessment:
Weight (in%)**

<ul style="list-style-type: none"> – projektna naloga – ustni izpit – končna ocena izpita je povprečje vsote ocen posameznih deležev z upoštevanjem uteži 	<p style="text-align: center;">50</p> <p style="text-align: center;">50</p>	<ul style="list-style-type: none"> – project work – oral examination – the final grade of the exam is the average of both grades
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Reference nosilca / Lecturer's references:

<p>Izbrane reference:</p> <ul style="list-style-type: none"> – SIMONIČ, Igor. The Implementation of CLP in the pharmaceutical industry : Comparison of classification and labelling of certain pharmaceutical ingredients = Izvajanje uredbe CLP v farmacevtski industriji : Primerjava razvrščanja in označevanja nekaterih učinkovin. V: CROITORESCU, Valerian, GORENC ZORAN, Annmarie. Technology in the era of sustainable development : scientific monograph = Tehnologije v dobi trajnostnega razvoja : znanstvena monografija. Novo mesto: Fakulteta za industrijski inženiring: = Faculty of Industrial Engineering, 2016, str. 130-144, tabele. [COBISS.SI-ID 1225462] – SIMONIČ, Igor. Izvajanje uredbe CLP v farmacevtski industriji : Primerjava razvrščanja in

označevanja nekaterih farmacevtskih učinkovin = The Implementation of CLP in the pharmaceutical industry : Comparison of classification and labelling of certain pharmaceutical ingredients. V: GORENC ZORAN, Annmarie (ur.). Tehnologija v dobi trajnostnega razvoja : zbornik povzetkov = Technology in the era of sustainable development : conference proceedings abstracts. Novo mesto: Fakulteta za industrijski inženiring, 2016, str. 25-26. http://rii.fini-unm.si/wp-content/uploads/2016/04/Zbornik-povzetkov-konference_FINAL-WEB.pdf. [COBISS.SI-ID 1181942]

- 3. MEDIC, Dejan. Izvajanje uredbe REACH v družbi IMP Armature, d. o. o. : diplomska naloga. Novo mesto: [D. Medic], 2016. 69 str., [11] str. pril., ilustr. [COBISS.SI-ID 1226742]