



Univerza v Mariboru

Fakulteta za naravoslovje
in matematiko

UČNI NAČRT PREDMETA / SUBJECT SPECIFICATION

Predmet:	Sporazumevanje za inženirje
Subject Title:	Communicating for Engineers

Študijski program Study programme	Študijska smer Study field	Letnik Year	Semester Semester
Tehnika – področje izobraževanja		1	letni
		ali	
Education in Engineering		2	zimski
		1	Summer
		or	
		2	winter

Univerzitetna koda predmeta / University subject code:

Predavanja Lectures	Seminar Seminar	Sem. vaje Tutorial	Lab. vaje Labor work	Teren. vaje Field work	Samost. delo Individ. work	ECTS
10	5				75	3

Nosilec predmeta / Lecturer:

Jeziki / Predavanja / Lecture:
Languages: Vaje / Tutorial:

Pogoji za opravljanje študijskih obveznosti:

Ni predpisanih pogojev.

Prerequisites:

There are no preconditions prescribed.

Vsebina:

- **Retorika**
 - Zgodovina retorike
 - Argumentiranje
 - Manipuliranje
 - Moderni retorični vzorci (standardni vzorec, AIDA, AITA...)
- **Komunikacija**
 - Udeleženci komunikacije
 - Okoliščine komunikacije
 - Načela uspešne komunikacije
 - Besedna in nebesedna komunikacija
- **Komunikacija v inženirski praksi**
- **Govorno-poslušalska komunikacija**
 - Kako uspešno posredovati novo znanje?
 - Kako nazorno razložiti?
 - Kako postaviti vprašanje, ki bo sprožilo razmišljanje in živahno razpravo?
 - Kako zastaviti nalogo in hkrati uspešno motivirati?
 - Kako učinkovito posredovati povratno motivacijo?
 - Kako razumevajoče svetovati?

Content (Syllabus outline):

- **Rhetoric**
 - History of rhetoric
 - Argumentation
 - Manipulation
 - Modern rhetorical samples (standard sample, AIDA, AITA...)
- **Communication**
 - Participants of communication
 - Circumstances of communication
 - Principles of successful communication
 - Verbal and nonverbal communication
- **Communication in the Engineers life**
- **Speaking listening communication**
 - How successfully transfer new knowledge?
 - How to explain?
 - How to ask the question to initiate thinking and discussion?
 - How to give homework and how to motivate?
 - How to transfer the returning information?
 - How to give the advice?

- **Komunikacija v bralno-pisnem kanalu**
 - Kako oblikovati osebne zapiske in kako tega naučiti učence?
 - Kako oblikovati interna poročila?
 - Kako napisati navodila?
 - Kako napisati poročilo o projektu
 - Kako napisati članek?
 - Kako napisati /oblikovati predstavitev? Kako in kdaj uporabiti predstavitvena orodja? Kako in kdaj uporabiti vizualne medije?

- **Communication in written channel**
 - How to form personal records and how to teach pupils to do that?
 - How to form internal report?
 - How to write instruction?
 - How to write the project report?
 - How to write the article?
 - How to write the presentation?
 - How to use presentation tools? How and when use visual media?

Temeljni literatura in viri / Textbooks:

- Zidar Gale, T. (2007). *Retorika – veščina prepričevanja*. Ljubljana: Planet GV
- Žagar, I. Ž., B. Domanjko (2006). *Argumentiranost kot model uspešne komunikacije*. Domžale: Izolit
- Aberšek, B., *Tehnologija sporazumevanja*, Fakulteta za strojništvo, Maribor, 2005
- Ule M.(2005): *Psihologija komuniciranja*. Ljubljana.

Cilji:

Udeležence usposobiti za uspešno, samozavestno, spretno in pravilno komuniciranje s skupino in posameznikom v pedagoškem procesu - tako v govorno-poslušalskem kot tudi v bralno-pisnem kanalu.

Objectives:

The aim of the course is to develop communication competence: to develop skills for successful communication with the group and single person, in the pedagogic process or elsewhere in life in listening and reading channel.

Predvideni študijski rezultati:

Znanje in razumevanje:

- Študenti bodo razumeli pomen razvite zmožnosti komuniciranja v slovenskem jeziku za doseganje ciljev v njihovem poklicnem in osebnem življenju.
- Usvojili bodo znanje in zmožnosti za uspešno in hitro uporabo strokovne literature in sodobnih informacijskih virov za dopolnjevanje lastnega strokovnega znanja in za posredovanje te spretnosti učencem v edukacijskem procesu.
- Naučili se bodo uporabljati komunikacijske tehnike za dialoški sporazumevanje z učenci in se tako usposobili za opravljanje svoje pedagoške vloge v razredu.
- Usvojili bodo zmožnosti za predstavljanje strokovnih rešitev ter za pisanje o njih.

Prenesljive/ključne spretnosti in drugi atributi:

Spretnost uporabe komunikacijske kompetence, strokovne literature, uporaba IKT in drugih didaktičnih pripomočkov.

Intended learning outcomes:

Knowledge and Understanding:

- Students will understand the meaning of communication competence in Slovene language for achieving aims in their professional and personal life.
- They will get knowledge and skills needed for successful and quick use of professional literature and current informational sources.
- They will possess skills to transfer this skills in the educational process.
- They will learn to use communicative techniques for dialogue communication with their students.
- They will develop skills needed for presenting their professional work in written and oral channel.

Transferable/Key Skills and other attributes:

Communicative skills, competence of using professional literature, competence of using ICS

Metode poučevanja in učenja:

Predavanja, individualne naloge, sodelovalno (dialoško) učenje, laboratorijske vaje: simulacije, igre vlog.

Teaching and learning methods:

Lectures, individual assessment, group and dialogue learning, simulation, presentation, role play

Načini ocenjevanja:

Način (pisni izpit, ustno izpraševanje, naloge, projekt):
diskusije v elektronskem forumu,
seminarska naloga,

Delež (v %) /
Weight (in %)

20 %
40 %

Assessment methods:

Type (examination, oral, coursework, project):
discussion in electronic forums,
seminar works,

predstavitev seminarske naloge, zagovor seminarske naloge.	20 % 20 %	seminar work presentation, seminar work defence.
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Reference nosilca / Lecturer's references:

ABERŠEK, Boris, KORDIGEL ABERŠEK, Metka. Development of communication training paradigm for engineers. *Journal of Baltic science education*, ISSN 1648-3898, 2010, vol. 9, no. 2, str. 99-108. [COBISS.SI-ID [17832456](#)]

HUS, Vlasta, KORDIGEL ABERŠEK, Metka. Questioning as a mediation tool for cognitive development in early science teaching. *Journal of Baltic science education*, ISSN 1648-3898, 2011, vol. 10, no. 1, str. 6-16. [COBISS.SI-ID [18366472](#)]

ABERŠEK, Boris, KORDIGEL ABERŠEK, Metka. Information communication technology and e-learning contra teacher. *Problems of education in the 21st century*, ISSN 1822-7864, 2010, vol. 24, str. 8-18, ilustr. [COBISS.SI-ID [18006280](#)]