



UNIVERSITY OF NIŠ

Course Unit Descriptor

Faculty

Faculty of Mechanical Engineering

GENERAL INFORMATION

Study Program	Mechanical Engineering		
Study Module (if applicable)	-		
Course Title	Tribology		
Level of Study	<input checked="" type="checkbox"/> Bachelor	<input type="checkbox"/> Master's	<input type="checkbox"/> Doctoral
Type of Course	<input type="checkbox"/> Obligatory	<input checked="" type="checkbox"/> Elective	
Semester	<input checked="" type="checkbox"/> Autumn	<input type="checkbox"/> Spring	
Year of Study	III		
Number of ECTS Allocated	6		
Name of Lecturer/Lecturers	Dušan S. Stamenković		
Teaching Mode	<input checked="" type="checkbox"/> Lectures	<input type="checkbox"/> Group tutorials	<input checked="" type="checkbox"/> Individual tutorials
	<input checked="" type="checkbox"/> Laboratory work	<input checked="" type="checkbox"/> Project work	<input checked="" type="checkbox"/> Seminar
	<input type="checkbox"/> Distance learning	<input type="checkbox"/> Blended learning	<input type="checkbox"/> Other

Purpose and Overview (max. 5 sentences)

Introduce students to the basics of tribology concepts and basic tribology theories which describe the processes of friction, wear and lubrication. Internal and external tribological phenomena in mechanical systems, road and rail vehicles are particularly studied.

Syllabus (brief outline and summary of topics, max. 10 sentences)

1) General introduction, 2) Surface roughness, 3) Real area of solid contact, 4) Sliding friction, 5) Rolling friction, 6) Static and dynamic friction, 7) Basic theories of friction, 8) Heat generation in friction, 9) Wear and wear parameters, 10) Lubrication, 11) Tribology aspects in rail and road vehicle movement, 12) Economic and ecologic aspects of tribological processes

Language of Instruction

Serbian (complete course) English (complete course) Other _____ (complete course)

Serbian with English mentoring Serbian with other mentoring _____

Assessment Methods and Criteria

Pre exam Duties	Points	Final Exam	Points
Activity During Lectures	5	Written Examination	Max. 55 (depending on Teaching Colloquia)

Practical Teaching	10	Oral Examination	30
Teaching Colloquia	55	Overall Sum	100

***Final examination mark is formed in accordance with the Institutional documents**