Course Outline Model (Syllabus)		
Faculty:	Faculty of Geosciences	
Name of study program:	Materials and Metallurgy	
Department:	Materials and Metallurgy	
Level:	Master	
The code of subject:	8	
Subject:	Mechanical Properties	
Subject Status:	Elective	(Compulsory or Elective)
Semester:	III	(Winter / Summer)
Total hours:	2+2	(According to approved programe)
ECTS:	4	(According to approved programe)
Schedule / Hall		
Academic year:		
Professor:	Prof.Asoc.Dr.Muharrem Zabeli	
Assistants:		
Contacts:		Assistant
Email:	Muharrem.zabeli@umib.net	
Phone:	044383855	

BRIEF CONTENT OF SUBJECT	Introduction, role and importance of mechanical properties of materials Tensile test Pressure test Bending test Fracture impact energy (work) test Material slip Material fatigue (fracture) Residual stresses Material strength Determination of technological properties of materials Reinforcement mechanisms of materials Elasticity of materials Plasticity of materials Dislocations	
AIMS	The aim of the course is to acquaint students with the main methods of mechanical properties of materials in order to determine their quality and to acquaint students with the relevant standards for the implementation of relevant methods for determining the mechanical properties	
EXPECTED LEARNING OUTCOMES	After completing this course (students) students will be able to: 1 to know and identify the relevant test methods for determining the mechanical properties of materials and details, 2-to determine the relevant standard of tests for determining the mechanical properties of materials and details, 3 to use appropriate methods for determining the mechanical properties of materials and details according to the relevant standard, 4 to ascertain the type and intensity of deformation depending on external loads, 5. To reason and discuss the relevant test results 6-to manage the necessary equipment according to the relevant standard	
PROGRAM	**Weeks**	Topic and Readings
	Week - I	Introduction, role and importance of mechanical properties of materials
	Week - II	Standards and technical norms in the field of material testing

	Week - III	Tensile test
	Week - IV	Evidence in print
	Week - V	Fracture shock energy (work) test
	Week - VI	Slipping of materials
	Week - VII	The first evaluation
	Week - VIII	Fatigue of materials
	Week - IX	Fracture (destruction) mechanics
	Week - X	Remaining strains
	Week - XI	Hardness of materials
	Week - XII	Methods for measuring and determining hardness
	Week - XIII	Reinforcement mechanisms of materials
	Week - XIV	Elasticity and plasticity of materials
	Week - XV	Second evaluation
LITERATURE	1.I.Vitez,Ispitivanje mehanickih svojtava metalnih materijala, Slavo. Brod , 2006. 2.W.F. Hosford, ”Mechanical Behavior of Materials?, Cambridge, 2005. 3.Bajrush Bytyci, Rr Maksuti, Kontrolli i bashkësive të salduara, Prishtinë, 2009.	
TEACHING METHODOLOGY	**Lectures, exercises, presentations, assignments and industry visits**	

Contribution to student workload (which should correspond to student learning outcomes 1 ECTS credit = 25 hours)			
Activity	**Hours**	**Day/Week**	**Total**
Lectures	2	15	30
Exercise sessions - theoretical	2	15	30
Field exercises			
Practical work	2		2
Consultation with the professor / assistant	-	-	-
Colloquiums / seminars	2	2	4
Independent tasks (work)	2	3	6
Student self study time (in library or at home)	4	10	40
Final exam preparation	4	2	8
Time spent in assessment (tests, quizzes, final exams)	2	2	4
Projects, presentations, etc.	1	1	1

EVALUATION

Evaluation methods [according to the Statute and Regulation of UMIB Studies]	
Tests	30%
Practical test during exercises	10%
Seminary work (in word)	10%
Interpretation and presentation of seminary work	
Tasks and essays during the semester	10%
Final exam	10%

ACADEMIC POLICIES	• Work with Computer Written works must be computer written. In the paper work it is obligatory to respect the criteria for both the visual and the content aspect of the required works. Along these paper work it is required to respect the spelling rules and APA style • Ethics in teaching The different semester papers should be papers of each student. There will be no tolerance for copying, "borrowing" from the Internet or any other material. The same or similar works will have negative evaluations in the final evaluation of the student. • Deadlines The deadlines for submitting the paper work will be determined in agreement with the students. There will be no tolerance for delays in the submission of works. Failure to arrive at the time when the assignment is explained does not justify the student for not submitting the paper. The deadline will be given earlier. If you are going to travel abroad, then you need to submit the paperwork in advance. The student has the right to request a consultation with the professor whenever he / she deems it reasonable and necessary to carry out his / her work. • Rules of conduct and academic policies: o active participation of students in lectures o participation in discussion, comments and free expression of opinion, opinion and academic position (with arguments) o Mandatory independent work and use of additional sources of information (various scientific websites, scientific journals, conference proceedings, etc.) o Respecting lecture schedules without compromising academic freedom (silent cell phones) o respecting the word, thoughts and ideas of colleagues o low tolerance for late arrivals and departures without any valid reason o preparation and equipping with relevant lectures, (obligation of the teacher).

)