

Name subjects :		MECHANICS OF MATERIALS		
Code subjects	Case status	Semester	Number of ECTS credits	Number of lessons (weekly)
PO2MM	Required	III	8	2P+3V+1L

Studio programs for which is organized by : Polytechnic , general studies

Conditionality other Subjects : None .

Idea studies subjects :

Idea studies the subject is that students acquire thorough insight into mechanics materials through analytical approach . The goal is to understand each other basic concepts deformation and voltage , as and methods determination and budget carrying capacity line carrier . Teaching includes theoretical lectures and practical exercises , which ensures comprehensive understanding and application acquired knowledge in practice .. Enable students to the same principles applications in practice . Efficient use available literature and laboratory equipment . Realization project tasks .

Goals studies Subject : Objective The subject is that, through analytical approach , get to know student with mechanic materials , enable you study for determination deformation and voltage in rods and beam carriers and budget their loadability .

Outcomes learning :

A student who successfully overcome this one subject , will be able to :

1. Understands basic principles mechanics materials , including concepts deformation and voltage ;
2. Analytical solves problems tied for stresses in the line carriers ;
3. Develops skills necessary for budget carrying capacity construction , with application theoretical and practical method ;
4. There is adequately knowledge of characteristics materials and their characteristics .

Name and last name teacher and Associate : Prof. Dr. Athanasius Kočov , mr. Semso Kalach

Method teaching and overcoming materials : lectures , exercises , tests , projects tasks .

WORK PLAN

Sunday :	Name methodological unit for lectures (L), exercises (V) and others teaching contents (O); Planned shape checks knowledge (Pz)	
Preparatory Sunday	Introduction , preparation and enrollment semester .	
And Sunday	P/V/L	Introduction to Mechanics materials : theory elasticity , basic hypotheses , concepts and concept voltage .
II	P/V/L	Linear and straight condition voltage : normal and shearing voltage , Hooke law .
III	P/V/L	Longitudinal strain : elongation rod , Poisson effect , thermal expansion .
IV	P/V/L	Twisting sticks circular transverse cross section .
V	P/V/L	Twisting sticks circular transverse cross section – test 1 .
VI	PZ	Colloquium
VII	P/V/L	Axial moments inertia .
VIII	P/V/L	Clean bending beam carrier .
IX	P/V/L	Clean bending beam carrier – test 2 .
X	P/V/L	Eccentric burden pillars and beam carrier .
XI	P/V/L	Clean shear beam carrier .
XII	P/V/L	Bending by force beam carrier : normal and shearing voltages .
XIII	P/V/L	Bending by force beam carrier : normal and shearing voltages . - test 3
XIV	P/V/L	Main normal and maximum shearing voltage .
XV	P/V/L	Main normal and maximum shearing voltage - test 4 .
XVI	PZ	Final exam .
XVII	Verification semester and enrollment rating	
XVIII	Correctional exam deadline	

Obligations student in progress classes : lectures , exercises , discussions , projects tasks .

Consultations by e- mail : YES

Load student

Sunday :

8 credits x 40/30 = 10 hours and 40 minutes

Structure :

2 hours lectures

3 hours exercises

1 hour laboratory exercises

4 hours and 40 min of individual work student including and consultations .

In the semester :

Total burden for subject 8x30 = 240h

Structure :

Teaching and final exam : 10h40min x 16 weeks = 170h40min

Necessary preparations before beginning semester (administration , enrollment , certification) : 10h40minx2=21h20min

Supplementary work for preparation and laying remedial exam time : 0-48h

Literature :

1. FP Beer, ER Johnston, JT Dewolf , and DF Mazurek , Mechanics of Materials, 7th ed. (McGraw-Hill, 2009) (textbook and collection tasks)
2. R. Pejović , Resilience materials , (Podgorica , 2015) .

Shapes checks knowledge and evaluation :

Tests 20%, midterm exam 40% and final exam 40%.

Rating	A	B	C	D	E
Number point	90-100	80-89	70-79	60-69	50-59