



Меѓународен Универзитет Визион - International Vision University
 University Ndërkombëtar Vizion - International Vision University

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**ITEM LAYOUT
(SYIABUS)**

SUBJECT TITLE	SUBJECT CODE	SEMESTAR	TOTAL AVAILABLE FUND OF HOURS	ECTS
STRENGTH OF MATERIALS	ARC-2005	3	150	5

It's a pre-inseparable note predmetot	yes/no
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Subject language	Macedonian, Turkish, English
Subject type	Election
Degree	First cycle of studies
Subject transmitter	
Subject assistants	
Classroom	Online
Out-of-hours consultations / Classes and place	

The purpose of the subject matter	Familiarization with basic terms of strength of materials. Analysis of the conditions of strains and deformations. Dimensioning constructive elements with elementary transverse intersects. Brief familiarity with static unspecified carriers.
Subject learning results	Theoretical teaching is performed through lectures on subject matter. Practical teaching is performed, in groups, through short thematic exercises, with previous necessary explanations.
Program content	The subject program is designed in two segments. The first segment covers the theoretical part of the teaching, and the second covers the practical part of the teaching. Theoretical teaching: Introduction. Physical relationships between them. Temperature influences. dimensioning. Complex strains. The winding. Static unspecified carriers. Static unspecified beams. Static unspecified frames. Practical teaching: Geometric characteristics on flat surfaces.

DISTRIBUTE TOPICS BY TIME

Sunday	Theme	Preliminary preparations
1	The introduction. The weight. Moments on a flat surface. Types of moments of inertia on flat surfaces. Steiner's theorem. Main axes and main moments of inertia. Ellipse of inertia. The main central moments of inertia on a complex surface.	

2	Explaining examples of moments of inertia on flat surfaces. (Steiner's theorem)	
3	Types of strain. Axial-loaded pressure and tightening sticks. Axial strains. Normal strains. Deformations. Huk's law. A diagram of strains and dilations. Strains and deformations from temperature changes. Dimensioning of axial-straining sticks. Resin.	
4	Scrolling. Normal strains. It's a resilient moment. A coefficient of using a cross-cross-country. Tangential strains. Dimensioning carriers tense to scroll	
5	Elastic line. Deformations and at dawn.	
6	Explaining examples of axial strain. Explaining examples of real scrolling	
7	Complex strains. Tightening and scrolling. Eccentric pressure of short sticks.	
8	An apology. Curl (torso). Axial-pressed stick curtain.	
9	Static unspecified carriers. Continuous carriers.	
10	Explanation of appropriate numerical examples from continuous carriers.	
11	Frames. Explanation of appropriate numerical examples of frames.	
12	Explanation of appropriate numerical examples of frames.	

ECTS TABLE AND TIME FUND

Presentation / Seminar			
Study outside class (preliminary preparation and improvement)	14	3	42
Colloquium	1	12	12
Exam	1	14	14
Total load on the object			
ECTS		5	

GENERAL PRINCIPLES FOR THE SUBJECT MATTER

Respected students,

To be part of the subject, learn lessons completely and achieve success, you must come to every lesson prepared by reading basic and additional literature. We expect you to adhere to hours, not to interrupt classes unless absolutely necessary, Actively participate in the lesson, communicate with your teacher and classmates and be active in discussions. At the beginning, middle or end of each lesson Students attending all classes during the semester will also be awarded a 15-point attendance score, in addition to the exam assessment.

LITTERATURA

Zadolžitelna lyteratra		
No	Naslov	Avtor, izdavach, godina
1	Strength of materials, University of St. Constantine and Helena Cyril and Methodius"- Skopje, Skopje, 1997	Atanasova-Kotseva, L., Simovski, B
2	Collection of solved tasks of strength of materials, University of St. Constantine and	Atanasova-Kotseva, L., Simovski, B

	Helena Cyril and Methodius" -Skopje, Skopje, 1995	
3		

Additional literature		
No	Naslov	Avtor, izdavach, godina
1	Statics, The McGraw-Hill Companies, 1996	Mott, R
2	Applied strength of materials, Pearson Prentice Hall, 2008	

Criterioni for a father (BODOVI-OCENA)

Kriteriumi for the father	Number	SUBJECT TO CONTRIBUTION
Presence	14	% 10
Project/ activity	1	% 30
Colloquium	1	% 30
Exam	1	% 30
TOTAL	14	%100

CODE ON ETHICS AT THE UNIVERSITY

In cases of cheating or attempting to make copies of exams, the appropriate disciplinary rules in the legislation of the Ministry of Education and Vision International University are expected to never support such behavior.