TOROS ÜNİVERSİTESİ

Faculty Of Engıneerıng
Cıvıl Engıneerıng (Englısh)

Course Information

STRENGTH OF MATERIALS II					
Code	**Semester**	**Theoretical**	**Practice**	**National Credit**	**ECTS Credit**
		Hour / Week			
CVE212	Spring	3	0	3	5

Prerequisites and co-requisites	none
Language of instruction	Turkish
Type	Required
Level of Course	Bachelor's
Lecturer	PROF. DR. ORHAN AKSOĞAN
Mode of Delivery	Face to Face
Suggested Subject	NONE
Professional practise (internship)	None
Objectives of the Course	Investigation of the strength of materails
Contents of the Course	Shear and flexure condition; Elastic curve; Axial load and flexure; Other compound strength of materials conditions; Energy methods; Buckşing of columns; Applications.

Learning Outcomes of Course

#	Learning Outcomes
1	Knows problem of shear and flexure
2	Computes elastic curve equation, performs solutions
3	Solves stresses due to axial load and flexure conditions
4	Solves torsion problem
5	Knows energy methods and performs solutions
6	Performs column buckling analysis

Course Syllabus

#	Subjects	Teaching Methods and Technics
1	Investigation of shear and flexure condition	Teach with theory and application
2	Numerical applications	Teach with theory and application
3	Description of elastic curve and solution methods	Teach with theory and application
4	Numerical applications	Teach with theory and application
5	Numerical applications	Teach with theory and application
6	Normal strenght applications	Teach with theory and application
7	Numerical applications	Teach with theory and application
8	Computation of members under torsion effect	Teach with theory and application
9	Mid-term exam	
10	Numerical applications	Teach with theory and application
11	Investigation of energy methods	Teach with theory and application

12	Application of the method	Teach with theory and application
13	Analysis of colomn buckling	Teach with theory and application
14	Numerical applications	Teach with theory and application
15	Numerical applications	Teach with theory and application
16	Final Exam	

Course Syllabus

#	Material / Resources	Information About Resources	Reference / Recommended Resources
1	Mukavemet Problemleri Cilt II, Mehmet Bakioğlu, Necla Kadıoğlu, Hasan Engin, Birsen Yayınevi, İstanbul, 2007		
2	Cisimlerin Mukavemeti, S. Timoshenko, Akademi Kitabevi, KİPAŞ Dağıtım, Birsen Yayınevi, İstanbul, 1980		

Method of Assessment

#	Weight	Work Type	Work Title
1	40%	Mid-Term Exam	Mid-Term Exam
2	60%	Final Exam	Final Exam

Relationship between Learning Outcomes of Course and Program Outcomes

#	Learning Outcomes	Program Outcomes	Method of Assessment
1	Knows problem of shear and flexure	1	1
2	Computes elastic curve equation, performs solutions	2	1
3	Solves stresses due to axial load and flexure conditions	3	1
4	Solves torsion problem	2	1
5	Knows energy methods and performs solutions	2	1
6	Performs column buckling analysis	1	2

PS. The numbers, which are shown in the column Method of Assessment, presents the methods shown in the previous table, titled as Method of Assessment.

Work Load Details

#	Type of Work	Quantity	Time (Hour)	Work Load
1	Course Duration	14	3	42
2	Course Duration Except Class (Preliminary Study, Enhancement)	0	0	0
3	Presentation and Seminar Preparation	0	0	0
4	Web Research, Library and Archival Work	0	0	0
5	Document/Information Listing	0	0	0
6	Workshop	0	0	0
7	Preparation for Midterm Exam	4	4	16
8	Midterm Exam	4	4	16
9	Quiz	0	0	0
10	Homework	0	0	0
11	Midterm Project	0	0	0
12	Midterm Exercise	0	0	0
13	Final Project	4	4	16

14	Final Exercise	0	0	0
15	Preparation for Final Exam	4	4	16
16	Final Exam	1	4	4
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