



**FACULTY OF ENGINEERING
CIVIL ENGINEERING DEPARTMENT
FALL 2015-2016**

COURSE OUTLINE

COURSE CODE	:	CE 224
COURSE TITLE	:	Strength of Materials
LOCAL CREDIT	:	4 (4, 0)
ECTS CREDIT	:	6
LECTURER	:	Simten Altan
COURSE HOUR	:	Tue 10:00-11:50, Th 8:30-9:50
OFFICE HOUR	:	Tue 9:00-10:00; Wed 9:00-10:00
TYPE OF COURSE	:	Compulsory
PREREQUISITIES	:	CE 221
LEVEL OF COURSE	:	Undergraduate

CATALOGUE DESCRIPTION :

This class is offered to civil engineering students in their second year of studies. The course is designed to provide the students with a thorough understanding of how the concepts taught in statics affect the behavior of structures. The objective of this course is elaborate on the knowledge of engineering mechanics (statics) and to teach the students the purpose of studying strength of materials with respect to civil engineering design and analysis. The course introduces the students to the concepts of engineering mechanics of materials and the behavior of the materials and structures under applied loads.

LEARNING OUTCOMES : By the end of this course students should be able to;

- Apply the concepts learned in statics class to calculate stress and strain
- Calculate internal forces and moments and stresses and strains in beams
- Calculate internal forces and moments and stresses and strains in axially loaded members
- Analyze and design simple connections
- Calculate torsion.

LEARNING / TEACHING METHOD :

The modes of delivery include lectures and discussions and lab works. In addition, quiz and homework assignments are used as learning tools.

METHOD OF ASSESSMENT :

Midterm	: 30 %
Quiz & Homework	: 30 %
Final	: 40 %

REFERENCE TEXTBOOKS :

1. Strength of Materials by R.C. Hibbeler