

FACULTY OF ENGINEERING CIVIL ENGINEERING DEPARTMENT FALL 2015-2016

COURSE OUTLINE

COURSE CODE : CE 222 COURSE TITLE : Dynamics LOCAL CREDIT : 3 (3, 0)

ECTS CREDIT : 5

LECTURER : Simten Altan COURSE HOUR : Wed 14:00-17:10

OFFICE HOUR : Tue 9:00-10:00; Wed 9:00-10:00

TYPE OF COURSE : Compulsory

PREREQUISITIES : ----

LEVEL OF COURSE : Undergraduate

CATALOGUE DESCRIPTION :

This class is offered to civil engineering students in their second year of studies. The course is designed as the second course in mechanics after statics. The main objective of this course is to help the students an understanding of dynamics and to help them develop the ability to analyze problems in a logical and systematic manner in the field of kinetics and kinematics of systems and particles.

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

- Draw free-body diagrams for objects or system of objects
- Apply the knowledge of physics and mathematics to perform kinematic and kinetic analysis
- Apply energy and momentum methods for particles and system of particles and for rigid bodies.

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.

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METHOD OF ASSESSMENT

Midterm : 40 % Quiz & Homework : 20 % Final : 40 %

REFERENCE TEXTBOOKS

1. Vector Mechanics for Engineers-Dynamics by Beer& Johnston