



# SYLLABUS – CE 1004

## STATICS

### 2019-2020 SPRING

<b>Instructor</b>	Dr. Ersan Güray
<b>Institute</b>	Faculty of Engineering - Department of Civil Engineering
<b>Place</b>	CB07
<b>Prerequisite</b>	MATH 1851 – Calculus I
<b>Schedule</b>	Friday 14:30-17:20
<b>Objective</b>	The main objective of this first course of mechanics is to develop in undergraduate engineering student the ability to analyze any statics problem in a simple and logical manner using the principles of equilibrium.
<b>Grading Policy</b>	Midterm Exam - 40 % Final Exam - 60 %
<b>Outline</b>	<ol style="list-style-type: none"><li>1. Vectors, force vectors, dot and cross product, equivalent systems, definition of moment .</li><li>2. Equilibrium of a Rigid Body, Truss, Truss stability, Internal Forces, Shear Moment diagrams.</li><li>3. Center of Gravity, Centroid, Moments of Inertia.</li><li>4. Virtual Work, Stability of a rigid system.</li></ol>
<b>Textbooks</b>	<ul style="list-style-type: none"><li>➤ <u>Hibbeler, R.C., Engineering Mechanics-Statics, SI Edition, Prentice Hall</u></li><li>➤ Ferdinand P. Beer &amp; E.Russel Johnston.Jr. Vector Mechanics for Engineers – Dynamics, SI Edition, McGraw-Hill Book Company</li><li>➤ Schaum’s Outline of Theory and Problems of Engineering Mechanics, Statics and Dynamics</li></ul>
<b>Link for problem sets and other resources</b>	<a href="https://drive.google.com/drive/u/0/folders/1cPDKQ7ecyKHq6InICMNxVR0LxQIiO3Bh">https://drive.google.com/drive/u/0/folders/1cPDKQ7ecyKHq6InICMNxVR0LxQIiO3Bh</a> or <a href="http://shorturl.at/dgA35">shorturl.at/dgA35</a>