

CE 2006: Mechanics of Materials II (材料力學二)

Spring 2021

Instructor Information

Name: Kuan-Chung Lin (林冠中)

Office: Rm. 47358 (卓群大樓 47358 室)

Email: kclin@gs.ncku.edu.tw

Tel: 06-2757575 (63109# 3580)

Time and location

Tu: 08:10~9:00 am; Th: 10:10~12:00 am

In-Class Sessions: Dept. Bldg of Civil Eng. 4509

Office hour

Wed: 3:00~4:00 pm

Teaching Assistants

蘇珮穎、謝承翰

Prerequisite

Engineering Mechanics: Statics

Course Description

The objectives of CE 2006, Mechanics of Materials II, are to learn the principles of mechanics applied to different materials and to develop problem solving skills through application of these principles to basic engineering problems.

Grading

The course grade is determined by the following components:

Homework 10%; Midterm I 30%; Midterm II 30%; Final Exam 30%; Extra credit (出缺勤)

Textbook and Reference

Reference: (1) Lecture notes

(2) *Mechanics of Materials*, 10th Edition (SI unit), by F. P. Beer, E. R. Johnston and D. F. Mazurek, Publisher: McGraw-Hill, 2016.

(3) *Mechanics of Materials*, 10th Edition, by Hibbeler, R. C., Pearson, 2017.

Textbook: *Mechanics of Materials*, 9th Edition (SI unit), by Barry J. Goodno and James M. Gere, Publisher: Cengage Learning, Copyright 2018.

Topics Covered

- Analysis of Stress and Strain (Chapter 7)
- Applications of Plane Stress (Chapter 8)
- Deflection in Beams (Chapter 9)
- Statically Indeterminate Beams (Chapter 10)
- Behavior of Columns (Chapter 11)
- Stresses in Beams (advanced topics) (Chapter 6)