

材料力學

Mechanics of Materials

舒貽忠 特聘教授

應用力學研究所

Schedule: Tuesday (34、應 113)、Friday (2、應 113)

材料力學乃探討非剛性結構體受力作用與變形之關係。本課程首先將引入應力與應變之概念，之後探討桿件受軸向力與扭力作用下之應力與應變關係、壓力容器之應力分佈、撓曲元件之彎矩分析與軸向元件之挫曲分析等。

COURSE OUTLINE:

1. Introduction and Review of Statics
2. Analysis of Stress: Concepts and Definitions
3. Analysis of Strain: Concepts and Definitions
4. Material Properties and Stress-Strain Relationships
5. Axial Loading Applications and Pressure Vessels
6. Torsional Loading of Shafts
7. Flexural Loading: Stresses in Beams
8. Flexural Loading: Beam Deflections
9. Buckling of Columns

Textbook:

W. F. Riley, L. D. Sturges, and D. H. Morris, *Mechanics of Materials*, 6th Ed., John Wiley & Sons, 2007.

Reference:

J. M. Gere and B. J. Goodno, *Mechanics of Materials*, 8th Ed., CENGAGE Learning, 2014.

Grading:

Homework: 20%

Midterm examination: 40%

Final examination: 40%

Contact Telephone Number:

舒貽忠老師(應力館 216): 3366-5627, Email: yichung@iam.ntu.edu.tw

Web: <ftp.iam.ntu.edu.tw> (材料力學_舒貽忠 : username: smart , password:)