97-2 Preliminary Syllabus, Da-Yeh Univ

Information			
Title	材料力學	Serial No. / ID	1453 / MAV2006
Dept.	機械與自動化工程學系	School System / Class	四技部2年1班
Lecturer	羅正忠	Full or Part-time	專任
Required / Credit	Required / 3	Graduate Class	NO
Time / Place	(一)34 / H466 (三)1 / H340	Language	Chinese

Introduction

Understanding is based on the explanation of the physical behavior of materials under load and then modeling this behavior to develop the theory. Emphasis is placed on the importance of satisfying equilibrium, compatibility of deformation, and material behavior requirements.
This course has the goal to cover
1. Provide a research of the theory of the stress and strain of normal and shear.
2. Provide some understanding of the mechanical properties of materials such as stress-strain diagram, ductile and brittle materials, Hooke ’ s law and strain energy.
3. Provide a research of stress and strain of combined loadings.
4. To be familiar with the application of mechanics of materials in mechanical system.

Outline

1. Stress
2. Strain
3. Mechanical Properties of Materials
4. Axial Load
5.Torsion
6. Bending
7. Transverse shear
8. Combined loadings

Prerequisite

物理、微積分、英文閱讀能力、靜力學