102-2 Preliminary Syllabus, Da-Yeh Univ

Information			
Title	應用力學(一)	Serial No. / ID	1725 / MAB1006
Dept.	機械與自動化工程學系	School System / Class	進修學士班1年1班
Lecturer	林海平	Full or Part-time	專任
Required / Credit	Required / 3	Graduate Class	No
Time / Place	(四)ABC / H439	Language	Chinese

Introduction

1. Introduce basic concepts and principles of statics, such as the units commonly used for forces, force vectors, equilibrium of a particle, force system resultants, and equilibrium of a rigid body. From the understanding of basic concepts, students would be able to apply them to practical problems.
2.Give lectures on applied mechanics, such as structural analysis, internal forces, and friction, enbling students to further understand the connection between the course material and the practice.
3.Introduce the calculation of center of gravity and centroid, moments of inertia. Build up the foundation for students to learn courses such as mechanics of materials and vibration.

Outline

1. General Principles
2. Force Vectors
3. Equilibrium of a Particle
4. Force System Resultant
5. Equilibrium of a Rigid Body
6. Structural Analysis
7. Internal forces
8. Friction
9. Center of Gravity and Centroid
10. Moments of Inertia

Prerequisite

High school physics and mathematics