101-2 Preliminary Syllabus, Da-Yeh Univ

Information			
Title	應用力學(一)	Serial No. / ID	1521 / 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	(二)AB / H440 (五)A / H440	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