

# 100-2 Preliminary Syllabus, Da-Yeh Univ

Information			
Title	應用力學(一)	Serial No. / ID	1846 / 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	吳佩學	Full or Part-time	專任
Required / Credit	Required / 3	Graduate Class	No
Time / Place	(四)ABC / B404	Language	Chinese

Introduction
<p>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.</p> <p>2. Give lectures on applied mechanics, such as structural analysis, internal forces, and friction, enabling students to further understand the connection between the course material and the practice.</p> <p>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.</p>

Outline
<ol style="list-style-type: none"><li>1. General Principles</li><li>2. Force Vectors</li><li>3. Equilibrium of a Particle</li><li>4. Force System Resultant</li><li>5. Equilibrium of a Rigid Body</li><li>6. Structural Analysis</li><li>7. Internal forces</li><li>8. Friction</li><li>9. Center of Gravity and Centroid</li><li>10. Moments of Inertia</li></ol>

Prerequisite
High school physics and mathematics