

# 102-1 Preliminary Syllabus, Da-Yeh Univ

Information			
Title	機械設計(一)	Serial No. / ID	1333 / MAV2007
Dept.	機械與自動化工程學系	School System / Class	四技部3年1班
Lecturer	紀華偉	Full or Part-time	專任
Required / Credit	Required / 3	Graduate Class	No
Time / Place	(一)34 / H340 (五)2 / H340	Language	Chinese

Introduction
<p>This course introduce the basic design concepts for machine elements. The main goals are:</p> <ol style="list-style-type: none"><li>1. understand the procedures and concepts about machine element design.</li><li>2. understand the characteristics of various engineering materials and their applications.</li><li>3. understand how to analyze the stress and deformation of machine elements.</li><li>4. Failure modes of machine elements</li></ol>

Outline
<ol style="list-style-type: none"><li>1. Introduction to Design</li><li>2. Materials</li><li>3. Stress and Strain</li><li>4. Deflection and Impact</li><li>5. Energy Methods in Design</li><li>6. Buckling Design of Members</li><li>7. Failure Criteria and Reliability</li><li>8. Fatigue</li></ol>

Prerequisite
Mechanics of Materials