## 100-1 Preliminary Syllabus, Da-Yeh Univ

Information			
Title	機械設計(一)	Serial No. / ID	1035 / MAV2007
Dept.	機械與自動化工程學系	School System / Class	四技部3年1班
Lecturer	鄭鴻儀	Full or Part-time	專任
Required / Credit	Required / 3	Graduate Class	No
Time / Place	( <u></u> )34 / H303 ( <u></u> )2 / H303	Language	Chinese

## Introduction

This course introduce the basic design concepts for machine elements. The main goals are:

- 1. understand the procedures and concepts about machine element design.
- 2. understant the characteristics of various engineering materials and their applications.
- 3. understand how to analyze the stress abd deformation of machine elements.
- 4. Failure modes of mechine elements

## Outline

- 1. Introduction to Design
- 2. Materials
- 3. Stress and Strain
- 4. Deflection and Impact
- 5. Energy Methods in Design
- 6. Buckling Design od Members
- 7.Failure Criteria and Reliability
- 8. Fatigue

## Prerequisite

Mechanics of Materials