

106-1 Full Curriculum of Da-Yeh University

Information			
Title	Human Factors Engineering	Serial No./ID	1617 /IDV2005
Required/Credit	Required /2	Time/Place	(Thu)78 /G410
Language	Chinese	Grade Type	Number
Lecturer /Full- or Part-time	Dndy Chung /Full-time	Graduate Class	Non-graduating Class
School System /Dept /Class, Grade	Vocational Ba. /Department of Industrial Design /Class 1, Grade 2		
Office Hour / Place	(Mon) 12:20~13:20, (Tue) 12:20~13:20, (Wed) 12:20~13:20, (Thu) 12:20~13:20 / G608		
Lecturer	n.a.		

Introduction
to learning the knowledge of ergonomics, and facilitate the concept of ergonomics to product design.

Outline
1. The concept of ergonomis 2. Human Sense 3. Anthropometry 4. Universal Design 5. Tools Design

Prerequisite
not necessary

The Relationship Between Courses and Departmental Core Competencies and Basic Skills
- Sense of aesthetics  Comprehension in engineering and technology  Design methodology  User oriented innovation capability  Team work and design management - Society trend and life-long learning  Ethics and social responsibility

Teaching Plan

Core Capability	Weight(%) 【A】	Ability index(Performance Indicators)	Teaching Methods	Assessment and Weight	Core Competency Learning Outcomes 【B】	Final Exam Grades 【C=B*A】
Comprehension in engineering and technology	20	To have good understanding about the new technologies. To possess fundamental knowledge regarding ergonomics (human factor), interface design, etc. To possess fundamental knowledge regarding manufacturing, such as material, forming, machining, assembly, surface treatment etc. To possess fundamental knowledge regarding physics, mechanics, mechanism, etc.	Lecturing	Midterm Exam: 25% Homework Assignment: 25% Product Manufacturing: 25% Assessment on Teamwork: 25%	Total: 100	20
Design methodology	20	To possess capability in intra-discipline integration and innovation To understand the design process and methodologies To possess basic knowledge about perceptual psychology. To make logical and critical analysis. To possess capability in presenting design concepts by sketching, rendering, computer graphics (2D & 3D), animation, model making, photography, presentation panels, etc. To possess good communication skill in both oral and written	Lecturing	Midterm Exam: 25% Homework Assignment: 25% Product Manufacturing: 25% Assessment on Teamwork: 25%	Total: 100	20

User oriented innovation capability	20	To understand life style of customers and their cultures To understand customers' need and their behaviors To understand user-oriented innovational thinking and capability.	Lecturing	Midterm Exam: 25% Homework Assignment: 25% Assessment on Teamwork: 25% Product Manufacturing: 25%	Total: 100	20
Team work and design management	20	To possess good communication ability and skills To have good understanding of project operation and personal role in the project To be able and be willing to work with other members as a team	Lecturing	Midterm Exam: 25% Homework Assignment: 25% Product Manufacturing: 25% Assessment on Teamwork: 25%	Total: 100	20
Ethics and social responsibility	20	To possess attributes of professional ethics and social responsibility	Lecturing	Midterm Exam: 25% Product Manufacturing: 25% Homework Assignment: 25% Assessment on Teamwork: 25%	Total: 100	20

Grade Auditing

Homework Assignment: 25%

Assessment on Teamwork: 25%

Product Manufacturing: 25%

Midterm Exam: 25%

Book Type (Respect intellectual property rights. Please use official textbooks and do not illegally photocopy others' works.)

Book Type	Book name	Author
Textbook	人因工程學 精華版	張一岑

Lesson Plan

Weeks	Content	Teaching Methods
1	Lecturing & Intellectual Property Protection (use legitimate textbooks only)	Lecturing
2	Lecturing	Lecturing
3	Lecturing	Lecturing
4	Lecturing	Lecturing
5	Lecturing	Lecturing
6	Lecturing	Lecturing
7	Lecturing	Lecturing
8	Lecturing	Lecturing
9	Middle Exam	Lecturing
10	Lecturing	Lecturing
11	Lecturing	Lecturing
12	Lecturing	Lecturing
13	Lecturing	Lecturing
14	Lecturing	Lecturing
15	Lecturing	Lecturing
16	Lecturing	Lecturing
17	Lecturing	Lecturing
18	Final Report	Lecturing