102-1 Preliminary Syllabus, Da-Yeh Univ

Information			
Title	微奈米工程量測與實作	Serial No. / ID	2001 / EEI3100
Dept.	電機工程學系	School System / Class	大學日間部3年1班
Lecturer	李得勝	Full or Part-time	專任
Required / Credit	Optinal / 3	Graduate Class	No
Time / Place	(—)89A / H444	Language	Chinese

Introduction

A. Department of Electrical Engineering Da-Yeh University, the aims of education (Educational Objectives)

- 1. Basic: teaching basic knowledge of mathematics and information.
- 2. Professional: professional and technical training in electrical engineering.
- 3. Integration: Strengthening the integration of technology application and training.
- 4. International outlook: foreign language skills, culture and international perspective.
- B. Department of Electrical Engineering Da-Yeh University, Education core competencies (Educational Outcomes)
- 1.1 has a basic knowledge of mathematics and ability.
- 1.2 has a physical basis of knowledge and skills.
- 1.3 has a basic knowledge of information technology and capability.
- 2.1 with electrical engineering expertise and application capability.
- 3.1 with data collection, simulation analysis, experimental design and problem solving ability.
- 3.2 necessary for engineering practice and implement the technical ability.
- 4.1 English with basic motor skills.
- 4.2 understanding of domestic motor development trend of related industries and pulse.
- 4.3 fully recognizes the importance of professional ethics, understanding of engineering technology on the

environment, social and global implications, fulfilling the social responsibility of engineers.

Course Objectives:

Engineering background of this course is designed to help students evolve from a manufacturing technology, understanding of micro-nano technologies, including nanotechnology principles and characteristics of nano materials testing, preparation of nano materials, micro-nm process and application (A1, A2, B2.1, B3.1)

Outline

Introduction to Nano materials (2) Nano PBL learning and drill programs Interim report The special nature of nanomaterials (2) Nanopowder synthesis (1) One dimensional nanomaterials synthesis (2) Nano template (1) Introduction to nano self-assembly (1) Measurement Technology

Prerequisite

Basic physical concepts