

# 100-1 Preliminary Syllabus, Da-Yeh Univ

Information			
Title	化合物半導體元件	Serial No. / ID	1352 / EGR5222
Dept.	電機工程學系碩士班	School System / Class	研究所碩士班1年1班
Lecturer	林昆泉	Full or Part-time	兼任
Required / Credit	Optinal / 3	Graduate Class	No
Time / Place	(一)ABC / H367	Language	Chinese

Introduction
1.Understand the applications of compound semiconductor material and devices. 2.Further understanding to the design and characteristic of compound semiconductor.

Outline
1.Compound Semiconductor Material Properties. 2.Metal-Semiconductor Interfaces. Theory and Practice of Contacts. 3.Hetero-structures & Hetero-junctions 4.Epitaxy 5.Measurement of Epitaxy Materials 6.Light Emission and Absorption / Quantum Effect Structures and Devices 7.MESFETs, HFETs & MODFETs devices 8.HBTs 9.Light Emitting Diodes (LEDs) 10.Laser Diodes 11.Photo-Detectors 12.Solar Cell 13.Measurement of Devices 14.Device Research Conference Preview / Industrial Overview

Prerequisite
Physics of Semiconductor Devices