

# 100-2 Preliminary Syllabus, Da-Yeh Univ

Information			
Title	薄膜工程	Serial No. / ID	2780 / EGR5055
Dept.	電機工程學系碩士班	School System / Class	研究所碩士班1年1班
Lecturer	宋皇輝	Full or Part-time	專任
Required / Credit	Optinal / 3	Graduate Class	No
Time / Place	(一)789 / H343	Language	Chinese

Introduction
<p>The scope of the course embraces the vapor-phase deposition techniques. Presented first are the principles that apply to all of the deposition techniques, such as gas kinetics, heat transfer, and vacuum technology. Then, specific techniques are grouped sequentially by the nature of the vapor phase over substrate - vacuum, gas, or plasma. The final part is a brief survey of film characterization methods.</p>

Outline
<p>Introduction            Vacuum Technology            Gas Properties.            Vacuum Gauges and Flow Meters.            Partial Pressure Analysis.            Vacuum Pumps.            Materials in Vacuum.            Leak Detection and Leak Detectors.            High-Vacuum System Design.            Thin Films Deposition            Physical Vapor Deposition.            Chemical Vapor Deposition.            Thin Films Characterization            Electrical and Electronic Properties            Optical Properties            Lithography and Pattern Transfer.</p>

Prerequisite
Physics