102-2 Preliminary Syllabus, Da-Yeh Univ

Information			
Title	薄膜工程	Serial No. / ID	2783 / EEI3044
Dept.	電機工程學系	School System / Class	大學日間部3年3班
Lecturer	宋皇輝	Full or Part-time	專任
Required / Credit	Optinal / 3	Graduate Class	No
Time / Place	(一)567 / H443	Language	Chinese

Introduction

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.

Outline

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.

Prerequisite

General Physics