## 102-2 Preliminary Syllabus, Da-Yeh Univ

Information			
Title	薄膜工程	Serial No. / ID	2430 / EEI3044
Dept.	電機工程學系	School System / Class	大學日間部4年1班
Lecturer	宋皇輝	Full or Part-time	專任
Required / Credit	Optinal / 3	Graduate Class	Yes
Time / Place	( <del>-</del> )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**