101-1 Preliminary Syllabus, Da-Yeh Univ

Information			
Title	結晶學與繞射概論	Serial No. / ID	0898 / MSI1006
Dept.	材料科學與工程學系	School System / Class	大學日間部3年1班
Lecturer	宋皇輝	Full or Part-time	專任
Required / Credit	Required / 3	Graduate Class	No
Time / Place	(二)34 / P501 (四)5 / H445	Language	Chinese

Introduction

This course is divided into two main parts: crystallography and X-ray diffraction analysis. The subject of crystallography is to introduce the the ideas of symmetry, structures, lattices and the architecture of crystals. The subject of X-ray diffraction analysis is describing the principle of X-ray diffraction and its applications in analysis of actual materials.

Outline

Basic Crystallography

Geometry and Stereographic Projection of Craystals

Reciprocal Lattice

Characterestics and Detection of X-rays

Coherent Scatterings and Diffraction

Fourier Transformation

Diffractions of Real Crystals

Principle of X-ray Diffractometer

Powder Diffraction

Prerequisite

Calculus, General Phyics