

101-1 Preliminary Syllabus, Da-Yeh Univ

Information			
Title	材料熱力學(一)	Serial No. / ID	0888 / MS12008
Dept.	材料科學與工程學系	School System / Class	大學日間部2年1班
Lecturer	李弘彬	Full or Part-time	專任
Required / Credit	Required / 3	Graduate Class	No
Time / Place	(二)56 / H441 (四)2 / H441	Language	Chinese

Introduction
The course is to enable students to understand the basic laws of thermodynamics and the thermodynamic behavior and materials, such as chemical, phase equilibrium and phase transfer , in order to learn advanced material for future courses or relevant work-related basis.

Outline
Thermodynamics, learning materials and basic courses in chemical engineering, one of the system is mainly to discuss the nature of equilibrium, and a variety of energy between the transition of knowledge, so almost all of the materials synthesis, refining and chemical reaction of equilibrium with the thermodynamic and related. Two semesters of this course, the term will be three laws of thermodynamics as a starting point, introducing the various thermodynamic functions, and from the statistical thermodynamic interpretation of the microscopic meaning of entropy; talking about gas behavior under the semester system and single-component phase equilibrium, and then explore the solution behavior , gas response and thermodynamic properties of condensed matter systems, and then apply the knowledge of thermodynamics predict various solid materials, phase equilibrium and phase transfer systems and derived applications in materials science and engineering.

Prerequisite
physics, chemistry, calculus