Course Schedule of MST Program
Semester: Spring, 2009

Course: Advanced Physical Chemistry (II)- 高等物化二
Time: T2T3T4 Tuesday(週二 9:10~12:00) or Monday(15:00~17:50)
Room: 311 IAM
Required, credit: 3
Course No.: TIGP727200

Date	lecturer	Date	lecturer
2/24 Tuesday 9:10~12:00	Prof. Sheng-Hsien Lin	4/20 Monday15:00~17:50	Prof. Keh-Ning Huang
3/3 Tuesday 9:10~12:00	Prof. Sheng-Hsien Lin	4/27 Monday15:00~17:50	Prof. Keh-Ning Huang
3/10 Tuesday 9:10~12:00	Prof. Sheng-Hsien Lin	5/4 Monday15:00~17:50	Prof. Keh-Ning Huang
3/17 Tuesday 9:10~12:00	Prof. Sheng-Hsien Lin	5/11 Monday15:00~17:50	Prof. Keh-Ning Huang
3/24 Tuesday 9:10~12:00	Prof. Sheng-Hsien Lin	5/18 Monday15:00~17:50	Prof. Keh-Ning Huang
3/31 Tuesday 9:10~12:00	Prof. Sheng-Hsien Lin	5/25 Monday15:00~17:50	Prof. Keh-Ning Huang
4/7 Tuesday 9:10~12:00	Prof. Sheng-Hsien Lin	6/1 Monday15:00~17:50	Prof. Keh-Ning Huang
4/14 Tuesday 9:10~12:00	Prof. Sheng-Hsien Lin	6/8 Monday15:00~17:50	Prof. Keh-Ning Huang

Speaker	Part 1 (Week 1-week 8) Prof. Sheng-Hsien Lin 林聖賢教授
Class Outline	1. First Law of Thermodynamics and Heat of Reactions 2. Ideal Gases and Real Gases 3. Second Law and Third Law of Thermodynamics 4. Real Solutions, Phase Transitions and Phase Diagrams 5. Chemical Equilibrium
Introduction	Three laws of thermodynamics will be discussed, which will be followed by showing their applications to treat properties of gases,liquids and solids, and chemical reactions. Thermodynamics of ideal solutions and real solutions will be presented.
Grading	Homeworks Quizzes Examinations
Textbook	1. “Introduction to Statistical Thermodynamics”, T. L. Hill, Dover Publication

Speaker	Part 2 (Week 9-week 16) Prof. Keh-Ning Huang 黃克寧教授
Class Outline	1. Review of classical mechanics 2. Review of quantum mechanics 3. Introduction to quantum statistical mechanics a. Mathematical models of macroscopic and microscopic states b. Entropy c. Statistical ensembles Density matrix and transition matrix
Textbook	Lecture Notes