

Applied Biophysical Chemistry II

(應用生物物理化學二, 543 M4890)

Syllabus

Instructor: Sheng D. Chao (趙聖德)

Tel: 3366-5066 (Room 416)

Credit: 3

Lecture hours: TBA

Classroom: IAM(應力所) TBA

References:

- (1) T. Engel, Quantum Chemistry and Spectroscopy (Pearson, San Francisco, 2006).
- (2) A. Cooper, Biophysical Chemistry (RSC, Cambridge, 2004).

Grading Policy:

- Quiz: 60%
- Final presentation: 40%

Course Description & Outline:

This course is designed primarily for engineering students to enlarge their knowledge base. The aim is to apply modern physical chemistry to problems of biological importance such as bioenergetics, enzyme kinetics and transport dynamics of biomolecules. In the second part of this course, more quantitative discussion on the techniques from physical chemistry will be emphasized.

- Biochemistry
- Applied Quantum Chemistry
- Applied spectroscopy
- Applications: Calculations of Intermolecular Forces
- Selected topics

Course Objective

The aim is to equip students with the ability to apply modern physical chemistry techniques to solve problems of biological importance.
