

2020 Spring - Advanced Analytical Chemistry

Credits: 3

Lecturer: Der-Lii Tzou 鄒德里老師 tzougate@gate.sinica.edu.tw

Classroom: A507, Institute of Chemistry, Academia Sinica

Class hour: Thursday, 09:00-12:00

Major Topics:

- Basics of Analytical Chemistry
- Physical Methods for Structural Characterization (NMR, MS, EM)
- Optical Microscopy
- Biosensor

Course Syllabus:

Week	Date	Topic	Professor
1	3/5	NMR Spectroscopy-Fundamental and Application I	Der-Lii Tzou
2	3/12	NMR Spectroscopy-Fundamental and Application II	Der-Lii Tzou
3	3/19	Fundamental of Mass Spectrometry	Yi-Sheng Wang
4	3/26	Application of Mass Spectrometry	Yu-Ju Chen
5	4/2	Bridge Holiday	No Class
6	4/9	General Principles in Analytical Chemistry	Yu-Ju Chen
7	4/16	Lab (MS & NMR)	Der-Lii Tzou Yu-Ju Chen
8	4/23	Fundamentals of Light Microscopy	Chau-Hwang Lee
9	4/30	Nanotechnology	Chun-Hong Kuo
10	5/7	Surface Spectroscopy	Jing-Jong Shyue
11	5/14	Electron Microscopy	Wei-Hau Chang
12	5/21	Super-resolution Light Microscopy	Chau-Hwang Lee
13	5/28	Midterm Report Deadline	Yu-Ju Chen
14	6/4	SPR sensing	Pei-Kuen Wei
15	6/11	Biochip- Microarray and Microfluidic chip	Ji-Yen Cheng
16	6/18	Final Presentation	Der-Lii Tzou
17	6/25	Dragon Boat Festival	No Class

Grading: Midterm Exam: 50% Final Presentation: 40% Attendance: 10%