

國立中正大學大學部 114 學年度第一學期

編號：2602219

授課教師：洪伯誠教授

科目名稱：有機化學（二）

英文譯名：Organic Chemistry (II)

學分數：3

修別：必修

Office Hours: Wednesday 1:00 pm-2:00 pm or by appt.

Lecture Text: J. McMurry, Organic Chemistry, 9th Ed., Cengage Learning, Boston, 2015.

References:

- (1) 天然有機化合物漫談 藝軒圖書公司 洪伯誠編著
- (2) 有機化學 藝軒圖書公司 方俊民等編著
- (3) Organic Chemistry, T.W. Graham Solomons, Graig B. Fryhle, Scott Snyder, 12th ed, Wiley, 2016
- (4) Organic Chemistry, Second Edition, Marye Anne Fox and James K. Whitesell, Jones and Bartlett Publishers, Sudbury, Massachusetts.
- (5) Organic Chemistry, William H. Brown and Christopher S. Foote, Saunders College Publishing, Orlando, Florida.
- (6) Organic Chemistry, P. Y. Bruice, Prentice-Hall.

Course Grading: Your grade will be determined by your performance in the three areas shown below:

Mid-term Exam	(50%)
Final Examination	(50%)
Quiz (chose top 10)	(15%)
Total points	(115%)

Examination Schedule:

Be advised that there will be no make-up exams.

Mid-term Exam	Nov 4	Tuesday
Final Examination	Dec 30	Tuesday

IMPORTANT:

(1) Any student who cannot attend the Mid-term or Final Exam should ask for leave as regulated, those who leave without permission are regarded as absent or skipping class. NO MAKE-UP EXAMS WILL BE GIVEN to the students without the official ask-for-leave procedure.

(2) If you are unfortunately seriously ill, get the doctor's certificate and inform me via e-mail ASAP. I will arrange the special make-up exams for you; however, the questions will be different from the previous exam and the degree of difficulty cannot be guaranteed to be the same.

(3) 因應新冠疫情影響，若須遠距上課，遠距考試時，請隨時關注 eCourse 2 上的最新公布。

The topics and their ordering as provided below are only approximate. This agenda reflects an optimism that could well be tempered. Accordingly, I reserve the right to shuffle and delete topics in response to time constraints.

Ch 12. Structure Determination: Mass Spectrometry and Infrared Spectroscopy 9/5, 9/7

Ch 13. Structure Determination: Nuclear Magnetic Resonance Spectroscopy 9/9, 9/11, 9/16

Ch 14. Conjugated Compounds and Ultraviolet Spectroscopy 9/18, 9/23, 9/25

Ch 15. Benzene and Aromaticity 9/30, 10/2, 10/7

Ch 16. Chemistry of Benzene: Electrophilic Aromatic Substitution. 10/9, 10/14, 10/16

Ch 17. Alcohols and Phenols. 10/21, 10/23

Ch 18. Ethers and Epoxides; Thiols and Sulfides. 10/28, 10/30

Mid-term Exam 11/4

Ch 19. Aldehydes and Ketones: Nucleophilic Addition Reactions. 11/6 11/11, 11/13

Ch 20. Carboxylic Acids and Nitriles. 11/13, 11/18

Ch 21. Carboxylic Acid Derivatives: Nucleophilic Acyl Substitution Reactions. 11/20, 11/25, 11/27

Ch 22. Carbonyl Alpha-Substitution Reactions. 11/27, 12/2, 12/4

Ch 23. Carbonyl Condensation Reactions. 12/4, 12/9, 12/11

Ch 24. Amines and Heterocycles. 12/16, 12/18, 12/23

Final Examination 12/30

Ch 25. Biomolecules: Carbohydrates. 5/22, 5/24

Ch 26. Biomolecules: Amino Acids, Peptides, and Proteins.

Ch 27. Biomolecules: Lipids. 5/31, 6/5, 6/7

Ch 28. Biomolecules: Nucleic Acids.

Ch 29. The Organic Chemistry of Metabolic Pathways.

Ch 30. Orbitals and Organic Chemistry: Pericyclic Reactions. 6/12, 6/14

Ch 31. Synthetic Polymers.