

系所	環境生物與漁業科學學系	2 年級
課號 / 班別	B3102606 / A	3學分
科目中文名稱	有機化學	
科目英文名稱	Organic Chemistry	
每週授課時數	3 小時	選修
任課老師	鄭學淵	
開課期間	一學期	

一、教學目標 Objective	中文--- 以電子移動主導原理(electron movement)增進學生對有機化學理解，並強調以有機化學基礎之觀點角度，增加對生物化學以及與環境相關之有機化學的認識 English--- This course begins from the principle of electron movement and progressing to complex organic compounds. However, this course is also emphasis on explaining the fundamental mechanistic similarities of reactions. After the students take this elective course should increasing their knowledge of organic chemistry.
二、先修科目 Pre_Course	中文--- 普通化學 English--- General Chemistry
三、教材內容 Outline	中文--- 重點為有機化學基礎理論，alkanes(含石油及其相關化合物), alkenes, stereochemistry, alkynes, aromatic compounds 之介紹及其相關反應(substitution, elimination, free radical reaction, ozone depletion) carbonyl chemicals 及其相關反應。與現代人生活息息相關的 polymer也將討論。 English--- Focus at the theory of the organic chemistry. Introduce the alkanes, alkenes, stereochemistry, alkynes, aromatic compounds and their reactions. It wills also discuss the polymer compounds.
四、教學方式 Teaching Method	中文--- 講義 & 投影片 English--- Handout and Slide
五、參考書目 Reference	中文--- 教科書: Fundamentals of Organic Chemistry, 5th edition John McMurry, (2003) 歐亞出版社 參考書:有機化學(全)，原著:McMurry第三版, 譯者: 方松傳等，高立圖書(02)23615330 English--- Fundamentals of Organic Chemistry, 5th edition John McMurry, (2003)
六、教學進度	中文---

Syllabi	<p>1. electronic structure & bonding, acid & base, 2. alkanes(含石油及其相關化合物), 3. alkenes & reactions, 4. stereochemistry, 5. reactions of alkynes, 6. aromaticity, 7. reactions of dienes, 8. Reactions of alkanes (free radicals, ozone depletion), substitution (SN1 & SN2), 10. elimination, 11. aromaticity 12. aromatic compounds & its reaction, 13.carbonyl, 14.carboxylic acids, 15.carboxylic acid derivatives, 16.structure determination</p> <p>English---</p> <p>1. electronic structure & bonding, acid & base, 2. alkanes, 3. alkenes & reactions, 4. stereochemistry, 5. reactions of alkynes, 6. aromaticity, 7. reactions of dienes, 8. Reactions of alkanes (free radicals, ozone depletion), substitution (SN1 & SN2), 10. elimination, 11. aromaticity 12. aromatic compounds & its reaction, 13.carbonyl, 14.carboxylic acids, 15.carboxylic acid derivatives, 16.structure determination</p>
七、評量方式 Evaluation	<p>中文---</p> <p>期末考40% 兩次小考各佔30%</p> <p>English---</p> <p>Mid-term test and Final examination</p>
八、講義位址 http://	