



課 綱 Course Outline

海洋生物研究所碩士班生物多樣性及演化組

中文課程名稱 Course Name in Chinese	海洋生態學概論				
英文課程名稱 Course Name in English	Introduction of Marine Ecology				
科目代碼 Course Code	MBE_58200	班 別 Degree	碩士班 Master' s		
修別 Type	選修 Elective	學分數 Credit(s)	2.0	時 數 Hour(s)	2.0
先修課程 Prerequisite					
課程目標 Course Objectives					
海洋雖佔地球表面積的70%以上，但人類對於海洋的認知與了解卻遠不及陸地，特別是在海洋生物與海洋生態方面。因此，藉由本課程的傳授，讓學生能認識、學習和探討海洋生物與生態，了解海洋生態保育和漁業資源永續利用的重要性，進而促使學生更關心和愛護我們的海洋環境，共同為拯救台灣每下愈況的海洋生態來努力。					
系教育目標 Dept.' s Education Objectives					
1	研究具有本土特色與國際競爭優勢的海洋生物多樣性及演化課題 Studying the topics of marine biodiversity and evolution with both local and international significance.				
2	培養具備海洋生物多樣性知識與研發能力以及國際觀的專業人才 Training professionals with knowledge, research capability, and global perspective in marine biodiversity.				
系專業能力 Basic Learning Outcomes				課程目標與系專業能力相關性 Correlation between Course Objectives and Dept.' s Education Objectives	
A	培養海洋生物多樣性及演化的認知及專業能力。 Professional knowledge and skills in marine biodiversity and evolution research.				
B	具備海洋生態保育及環境保護的概念。 Concepts of conservation of marine ecology and environment.				
C	具備獨立思考邏輯思辨及問題解決能力。 Capability of thinking independently and logically and solving problems.				
圖示說明Illustration : ● 高度相關 Highly correlated ○ 中度相關 Moderately correlated					

課程大綱
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1. Patterns in the Marine Environment
2. Primary Production Processes
3. Microbial Ecology: Production and the Decomposition of Organic Material
4. Secondary Production
5. Estuaries
6. Rocky and Sandy Shores
7. Pelagic Ecosystems
8. Continental Shelf Seabed
9. The Deep Sea
10. Mangrove Forests and Seagrass Meadows
11. Coral Reefs
12. Polar Regions
13. Impacts to Fisheries and Aquaculture
14. Disturbance, Pollution, and Climate Change

資源需求評估（師資專長之聘任、儀器設備的配合．．．等）
Resources Required (e.g. qualifications and expertise, instrument and equipment, etc.)

課程要求和教學方式之建議
Course Requirements and Suggested Teaching Methods

其他
Miscellaneous