

處理學期(Current Semester)：1091

請尊重智慧財產權，請勿非法影印

1091學期所開設課程『海洋動力學』的課程內容

課程代碼(Course Number)	B810303G
授課老師(Instructor)	羅耀財(Yao-Tsai Lo)
中文課名(Chinese Course Title)	海洋動力學
英文課名(English Course Title)	Dynamical Oceanography
開課年班(Grade and Class)	3A
選課人數(Quantity)	4
選課類別(Course Type)	選修(Elective Course)
上課時間(Course Meeting Days/Times)	206,207,208
上課地點(Classroom)	GH1204,GH1204,GH1204
開課系所(Department/Institute Office of Course)	海洋環境資訊系(Marine Environmental Informatics)
學分(Credit(s))	3
人數上限(Maximum Number of Students)	55
開課期別(Course Type)	單學期(semester course)
是否實習	否
備註(Note)	

課程綱要

教學目標	中文	讓學生瞭解影響世界海洋環流重要的物理過程。包括簡介海水的物理性質，海流，波浪與潮汐的動力理論，海洋環流等。
Objective	English	
先修科目	中文	應用數學或工程數學
Pre Course	English	
教材內容	中文	Chap 1 Introduction Chap 2 Properties of sea water relevant to physical oceanography Chap 3 The basic physical laws used in oceanography and classifications of forces and motions in the sea Chap 4 The equation of continuity of volume Chap 5 Salinity and double diffusion Chap 6 The equation of motion in oceanography Chap 7 The role of the non-linear terms and the magnitudes of terms in the equations of motion Chap 8 Currents without friction; geostrophic flow Chap 9 Currents with friction; wind-driven circulation Chap10 Thermohaline effects Chap11 Numerical models Chap12 Waves Chap13 Tides
Outline	English	
教學方式	中文	口授與投影片為主，配合習題作業
Teaching Method	English	
參考書目	中文	1.Introductory dynamical oceanography, S. Pond and G.L. Pickard, 2nd edition, 1991, Pergamon Press. 2.Descriptive physical oceanography: An introduction, G.L. Pickard and W.J. Emery, 5th edition, 1990, Pergamon Press 3.Introduction to Physical Oceanography, R.H. Stewart, 2004, Department of Oceanography, Texas A&M University. http://oceanworld.tamu.edu/home/course_book.htm

Reference	English	
教學進度	中文	1-3週講授一章
Syllabus	English	
評量方式	中文	20%平時與作業成績，40%期中考試成績，40%期末考試成績
Evaluation	English	
參考網址		