



## 課 綱 Course Outline

### 自然資源與環境學系碩士班

中文課程名稱 Course Name in Chinese	地球科學專題				
英文課程名稱 Course Name in English	Special Topics on Earth Sciences				
科目代碼 Course Code	NRES54090	班 別 Degree	碩士班 Master' s		
修別 Type	選修 Elective	學分數 Credit(s)	3.0	時 數 Hour(s)	3.0
先修課程 Prerequisite					
課程目標 Course Objectives					
建立碩士班學生之地球科學背景知識					
系教育目標 Dept.' s Education Objectives					
1	培養兼具國際視野與本土關懷的學生 To develop students who care about local issues and have an international perspective				
2	培養具備自然科學與社會科學知識的人才 To educate students to have knowledge of both the natural and social sciences				
3	培養具備環境倫理與人文素養的環境公民 To teach students to be environmental citizens (i.e., knowledgeable about environmental ethics and human issues)				
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	能覺知多元的自然科學與社會科學理論並具備研究能力 To have knowledge of natural and social science theories			○	
B	具備自然資源與人類社會議題之調查分析、規劃與經營之能力 To be able to investigate, analyze, plan, and manage both natural resource and human social issues			○	
C	具備將環境倫理與生態思想落實於永續性生活型態的能力 To implement sustainable lifestyles based on environmental ethics and ecological principles			○	

D	能以整全式的觀點來解析環境問題，並具備發展系統性解決方案的能力 To resolve environmental issues and develop systematic solutions with a global perspective	●
E	具備系統分析、未來思考、溝通協調與團隊合作的能力 The ability to analyze, plan, communicate, and coordinate with others (teamwork)	●
F	具備終身學習、國際視野與外語溝通的能力 To instill the values of lifelong learning, an international perspective, and the ability to communicate in a foreign language	●

圖示說明Illustration：● 高度相關 Highly correlated ○ 中度相關 Moderately correlated

課程大綱  
Course Outline

This course covers the following topics: Production and movement of surficial materials; mass movement including landslides and earthquake; neotectonics, soils and soil erosion; precipitation; streams and lakes; groundwater flow; glaciers and their deposits. The course combines aspects of geology, climatology, hydrology, and soil science to present a coherent introduction to the surface of the Earth, with emphasis on both fundamental concepts and practical applications, as a basis for understanding and intelligent management of the Earth's physical, chemical and biological environment.

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.)

由地科組老師合開

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

課堂講授  
Lectures

其他  
Miscellaneous

期中與期末考

There are mid-term exam and final exam. Both exams are in class close book exams. Mid-term exam is optional

If a student receives better grade in final exam than in mid-term exam, then final exam counts for 100% of the grade. If a student receives better grade in mid-term exam than in final exam, then mid-term exam counts for 2/5 of the grade and final exam counts for 3/5 of the grade.