



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	環境風險評估與管理專論				
英文課程名稱 Course Name in English	Special Topics on Environmental Risk Assessment and Risk Management				
科目代碼 Course Code	NRES51100	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	無				
課程目標 Course Objectives					
Risk assessment is an important element of environmental management. The term “ risk “ does not have a simple definition. We will include the basics of risk assessment, risk management and risk communication in this course. This course needs to understand the multidisciplinary fields then to learn the methods and tools used in performing these functions, including their limitations. In additions, you will be aware of the types and sources of uncertainties in risk assessments and find the possible of uncertainty					
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				
2	培養具備自然科學與社會科學知識的人才				
3	培養具備環境倫理與人文素養的環境公民				
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				
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				
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				
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				
E	具備系統分析、未來思考、溝通協調與團隊合作的能力				
F	具備終身學習、國際視野與外語溝通的能力				
圖示說明Illustration：● 高度相關 Highly correlated ○ 中度相關 Moderately correlated					
課程大綱					

Course Outline

1. Environmental Risk Assessment and Management
2. The structure of Environmental Risk Assessment
3. The Role of Modeling in the Risk Assessment Process
4. The Role of Modeling in the Risk Assessment Process
5. Overview of Hazard Assessment and Characterization
6. Approach to Risk Assessment of Chemical Mixtures
7. Human Health Risk Assessment
8. Risk Communication
9. Risk Management Plan

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.)

PC, Projector, Not book, Field trip.

課程要求和教學方式之建議

Course Requirements and Suggested Teaching Methods

This course uses a “Learn-Think-Do” model. To practice by doing:
Weekly Reading Assignments, Assignments, midterm take home exam,
term paper and oral presentation

其他

Miscellaneous