



課 綱 Course Outline
自然資源與環境學系學士班

中文課程名稱 Course Name in Chinese	大氣科學概論				
英文課程名稱 Course Name in English	Introduction to Atmospheric Science				
科目代碼 Course Code	NRES40120	班 別 Degree	學士班 Bachelor's		
修別 Type	學程 Program	學分數 Credit(s)	3.0	時 數 Hour(s)	3.0
先修課程 Prerequisite					
課程目標 Course Objectives					
介紹大氣中各種的現象，其演變規律與人類活動對它的影響。					
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	具備自然科學與社會科學的基礎知識 To be knowledgeable of fundamental theories in the natural and social sciences.			●	
B	具備觀察、理解、闡釋自然環境與人類社會互動及變遷關係的能力 To be able to observe, understand, and interpret the changing interactions of natural resources and human society.			○	

C	具備多元資料收集策略、閱讀論文、撰寫環境報導及創意口頭報告的能力 To have the ability to collect data, understand scientific literature, and write and present environmentally related reports.	
D	能終身學習、對環境維持熱情、關懷、並願意做出對在地環境獻身的承諾 To cultivate the values of lifelong learning, to maintain enthusiasm and concern for the environment, and to develop commitment to the local environment.	
E	具備環境倫理觀、社會責任感與社會實踐力 To develop and implement environmental ethics and social responsibility.	
F	具備獨立思考、溝通協調與團隊合作的能力 To think independently, to communicate effectively, and to cooperate with others as a team.	
G	具備基本外國語文能力 The be able 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

1. 大氣組成與構造
2. 大氣運動的原理與大氣環流
3. 氣象要素與天氣圖
4. 天氣系統
5. 氣象觀測與預報
6. 氣象災害
7. 大氣遙測
8. 氣候與氣候變遷

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.)

由從事大氣科學相關研究之教師授課，並請花蓮氣象站協助氣象要素、天氣圖、氣象觀測與預報之教學。

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

課堂講授與討論、參觀、野外實習、書報討論、影片欣賞。

其他 Miscellaneous

課程成績評定之依據和標準
Grading Criteria

上課表現，作業，報告，期中考，期末報告