國立東華大學

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	普通物理				
英文課程名稱 Course Name in English	General Physics				
科目代碼 Course Code		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
透過思考練習與互動討論的方式認識基本物理觀念，啟發物理學欣賞，學習建立物理模型與解決問題的方法，體認科學精神，藉以養成能獨立思考、明辨是非的學生。

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

Mechanics
1.Linear motion
2.The laws of motion
3.Work and energy
4.Collisions
5.Rotational motion
6.Gravity
7.Fundamental fluid mechanics
Oscillations and Mechanical Waves
1.Oscillatory motion
2.Wave motion
3.Superposition and standing waves

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

規劃負責老師：　　單位主管：

系課程委員會審議通過日期：