



課 綱 Course Outline  
物理學系應用物理博士班國際組

中文課程名稱 Course Name in Chinese	當代物理專題(一)				
英文課程名稱 Course Name in English	Topics in Contemporary Physics (I)				
科目代碼 Course Code	APH_D0010	班 別 Degree	博士班 Ph. D.		
修別 Type	必修 Required	學分數 Credit(s)	2.0	時 數 Hour(s)	2.0
先修課程 Prerequisite					
課程目標 Course Objectives					
<p>本課程引介當代物理課題與研究前緣，以拓展學生對物理科學的視野，且/或提供學生從事研究所需之實用知識。</p> <p>This course introduces selected topics and research forefronts in contemporary physics so to broaden a student's perspective of physical sciences and/or to equip a student with practical knowledge in research.</p>					
系教育目標 Dept.'s Education Objectives					
1	培養具有研發能力的高科技人才 Essential training of professionals for research and development knowledgeintensive industries.				
2	培養大學物理師資 Professional training for college physics teaching.				
3	厚植本系所及理工學院之教學研究水準 Promoting the teaching and researching potential of the department and the college.				
4	培養物理專業研究人才 Professional training in physics research.				
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	具備物理與相關應用領域之專業知識 Possessing professional knowledge in physics and related application fields.				●

B	能以物理知識與邏輯推理，分析解決物理問題 Being able to analyze and solve physics problems based on basic knowledge in physics as well as logical reasoning.	●
C	瞭解當代實驗儀器之原理，並具備操作實驗儀器之能力 Understanding the principles of up-to-date equipment and being able to operate them for performing physics experiments.	○
D	能利用電腦處理各類物理問題 Being able to use computers for solving various physics problems.	○
E	對學術倫理有清楚正確之認知 Properly and clearly acknowledging the academic ethics.	●
F	具備以口頭報告及論文寫作發表研究成果之能力 Possessing the skills of oral presentation and scientific writing for publishing research findings.	●
G	具備科技發展之國際觀及外語溝通能力 Having an international view of the technology developments and being able to use a foreign language for communications.	●

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

#### 課程大綱

#### Course Outline

課程內容依當年需求決定，所涵蓋主題將選自本系現有研究領域。

#### Course Outline

Course content will vary yearly with current need. Topics covered are to be selected from actively-pursued research fields of the department.

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

教學方式包含講授、討論或分組報告。教師可視學生研究領域與需求選擇主題，或經學生參與討論後決定之。

#### Course Requirements and Suggested Teaching Methods

This course will proceed with lectures, discussions and/or group presentations. Topics may be chosen by the instructor(s) in view of students' research fields, or determined through discussions with students.

#### 其他

#### Miscellaneous