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課 綱 Course Outline (博士班)

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| 中文課程名稱 Course Name in Chinese | 地殼演化特論 | | | | |
| 英文課程名稱 Course Name in English | Special Topics in Crustal Evolution | | | | |
| 科目代碼 Course Code | | 班 別 Degree | <input type="checkbox"/> 學士班 Bachelor's <input type="checkbox"/> 碩專班 Master's program <input type="checkbox"/> 碩士班 Master's <input checked="" type="checkbox"/> 博士班 Ph.D. | | |
| 修別 Type | <input type="checkbox"/> 必修 Required <input checked="" type="checkbox"/> 選修 Elective <input type="checkbox"/> 學程 Program | 學分數 Credit(s) | 3 | 時 數 Hour(s) | 3 |
| 先修課程 Prerequisite | | | | | |

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| 課程目標 Course Objectives | This course aims to broadly investigate and discuss the history and evolution of the Earth's crust and its underlying upper-mantle. Emphasis will be placed on topics related to the solid Earth, orogeny, regional geology, petrochronology, geochemical cycling, ore deposits, and subduction zone geodynamics. | | |
| 系教育目標 Dept.'s Education Objectives | 培養兼具國際視野與本土關懷的學生 | 培養具備自然科學與社會科學知識的人才 | 培養具備環境倫理與人文素養的環境公民 |
| 課程目標與系教育目標 相關性 Correlation between Course Objectives and Dept.'s Education Objectives | ● | ● | ◎ |
| 圖示說明 Illustration : ● 高度相關 Highly correlated ◎ 中度相關 Moderately correlated | | | |

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| 系專業(基本)能力 Basic Learning Outcomes | 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 | | | | | |
| 課程目標與系專業能力 相關性 Correlation between Course Objectives and Basic Learning Outcomes | A | B | C | D | E | F |
| | ● | ◎ | ◎ | ◎ | ● | ● |
| 圖示說明 Illustration : ● 高度相關 Highly correlated ◎ 中度相關 Moderately correlated | | | | | | |

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| 課程大綱 Course Outline 1. Earth Systems: overview 2. The Crust 3. Tectonic Settings and Regional Geology 4. The Upper Mantle 5. Mountain Building and Orogeny 6. Subduction Zone Geodynamics 7. Geochemical Cycling 8. Geological Resources |
| 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 |
| 課程成績評定之依據和標準 Grading Criteria Project Presentation (50%) and Term Paper (50%) |
| 其他 Miscellaneous |