



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 | 普通化學 | | | | |
| 英文課程名稱 Course Name in English | General Chemistry | | | | |
| 科目代碼 Course Code | CHEM10500 | 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 | | | | | |
| 介紹與化學有關之基本原理及概念。 | | | | | |
| 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 | | |
| 內容包含原子及分子結構、化學鍵結、分子軌域與酸和鹼、化學平衡、熱力學、化學動力學等化學基本原理及概念。 | | |
| 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.) | | |
| 現有合宜專任師資；購置訂閱普通化學相關圖書及期刊，提供幻燈機、投影機等 課程要求和教學方式之建議 | | |
| Course Requirements and Suggested Teaching Methods | | |
| 以Lecture為主 | | |
| 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：