# 朝陽科技大學 096學年度第1學期教學大綱
# General Chemistry（Ⅰ）普通化學(一)

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| 當期課號 | 1599 | Course Number | 1599 |
| 授課教師 | 陳家鐘 | Instructor | CHEN,CHIA CHUNG |
| 中文課名 | 普通化學(一) | Course Name | General Chemistry (Ⅰ) |
| 開課單位 | 應用化學系(四日)一B | Department | |
| 修習別 | 必修 | Required/Elective | Required |
| 學分數 | 3 | Credits | 3 |
| 課程目標 | 介紹化學之基本知識與觀念，使學生開始接觸較基礎的有機化學、分析化學、物理化學、生物化學，以便在二年級以後更有效率地學習各門化學之專業科目。 | Objectives | This course deals with the prelimianry introduction of first-year college chemistry. It includes the basic materials of organic chemistry, inorganic chemistry, analytic chemistry and physical chemistry.The details of the contents involving chemical bonding, elements, and chemical compounds, solution chemistry, various types of chemical reaction consisting of acid and base, oxidation and reduction, precipitation, etc., thermochemistry, chemical equilibrium, kinetics, thermodynamics, coordination compounds, organic chemistry and polymers. The format of this course includes lecture, problem setes, examination and recitation. |
| 教材 | General Chemistry by Raymond Chang 4th Ed. | Teaching Materials | General Chemistry by Raymond Chang 4th Ed. |
| 成績評量方式 | 8次小考，期中考及期末考 | Grading | 8 quizzes, mid-term and final exams. |
| 教師網頁 | | | |
| 教學內容 | 一、 化學簡介: 學習基本的理論及定義。<br>二、 原子、分子與離子。<br>三、 當量化學。<br>四、 水溶液反應。<br>五、 氣體反應。<br>六、 化學反應之能量關係。<br>七、 原子之電子結構。<br>八、 元素週期表。<br>九、 化學鍵(一): 共價鍵。<br>十、 化學鍵(二): 分子形狀與混成化軌道。 | Syllabus | 1. Introduction of basic chemistry.<br>2. Atoms, Molecules and Ions.<br>3. Stoichiometry.<br>4. Reactions in Aqueous Solutions.<br>5. Gases.<br>6. Energy Relationships in Chemical Reactions.<br>7. The Electronic Structure of Atoms.<br>8. The periodic Table.<br>9. Chemical Bonding I: The Covalent Bond.<br>10. Chemical Bonding II: Molecular Geometry and Hybridization of Atomic Orbitals. |

尊重智慧財產權，請勿非法影印。