國立台灣科技大學 114學年 第2學期 課程大綱

Spring 2026 NTUST Course Outline

授課教師：武德勝

Instructor:VO DUC THANG

課程名稱：化學(下)

Course Title：Chemistry (II)

2026/11/3

課程代號： CE163B001 Course Code 學分數： 3 Credits	必選修：必修/全學年 Required/Electve:Required/Full Yr. 先修課程： Prerequisites
節次教室： Time/Location	R6(TR-512) R7(TR-512) W10(IB-410-1) W9(IB-410-1)
專業核心能力： Core Professional Competencies	運用數學、科學及工程知識的能力與執行工程實務所需技術、技巧及使用現代化工具的能力。
課程網址： Course Website	
課程宗旨： Course Objectives	1. This course is the second semester of a year-long chemistry sequence designed primarily for interdisciplinary program students who require a full year of chemistry, as well as for other interested students. The course covers major topics in chemistry and provides a solid foundation for future applications in engineering and related fields. Emphasis is placed on fundamental principles, problem-solving skills, and practical applications relevant to modern science and technology. 2. The main topics covered this semester include: Solid and liquid states and solutions, reaction rates and chemical equilibrium, acid–base equilibria, solubility and complex-ion equilibria, thermodynamics and equilibrium, electrochemistry, and nuclear chemistry.
課程大綱： Outline of Lectures	Chapter 11: States of Matter; Liquids and Solids Chapter 12: Solutions Chapter 13: Rates of Reaction Chapter 14: Chemical Equilibrium Chapter 15: Acids and Bases Chapter 16: Acid-Base Equilibria Chapter 17: Solubility and Complex-Ion Equilibria Chapter 18: Thermodynamics and Equilibrium Chapter 19: Electrochemistry Chapter 20: Nuclear Chemistry
授課方式： Method of Instruction	講授 Lecture：0% 分組討論 Group discussion：0% 案例研討 Case study：0% 操做練習 Practical exercises：0% 講授 Lecture：%
教科書： Textbooks	Ebbing, Gammon. General Chemistry. Eleventh Edition. Cengage Learning.
參考書目： References	Zumdahl et al. Chemistry 10e. Asia Edition. Cengage Learning.

修課須知： Notice	
評量方式： Grading	Quiz: 40% Midterm Exam 1: 20% Midterm Exam 2: 20% Final Exam: 20%
備註說明： Notes	None