

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：物理化學(下)

Course Title : Physical Chemistry II

2026/6/22

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| 課程代號： TE201B001 Course Code | 必選修：必修/全學年 Required/Elective: Required/Full Yr. |
| 學分數： 3 Credits | 先修課程： Prerequisites |
| 節次教室： F9(IB-508) T10(IB-508) T9(IB-508) Time/Location | |
| 專業核心能力： 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。 Core Professional Competencies | |
| 課程網址： Course Website | |
| 課程宗旨： Course Objectives | 1. This course is the second semester of a year-long course intended primarily for interdisciplinary program students who are required to complete a one-year course. 2. The main themes of this semester include: Quantum Theory, Atomic and Molecular Structure, Chemical Kinetics, Molecular Interactions, and Solid-State Chemistry. |
| 課程大綱： Outline of Lectures | 1. Pre-Quantum Mechanics. 2. Introduction to Quantum Mechanics 3. Quantum Mechanics: Model Systems and the Hydrogen Atom 4. Atoms and Molecules 5. The Kinetic Theory of Gases 6. Kinetics 7. Molecular Interactions 8. The Solid State: Crystals |
| 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 | David W. Ball. Physical Chemistry, 2E. Second Edition. Cengage Learning. |
| 參考書目： References | Peter Atkins et al. Atkins' Physical Chemistry. International Edition. |
| 修課須知： Notice | |
| 評量方式： Grading | Quiz: 40% Mid-term Exam: 30% Final Exam: 30% |
| 備註說明： Notes | |