

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：楊瑩蓁

Instructor: Yang yingchen

課程名稱：化學實習(下)

Course Title : Chemistry Lab. (II)

2026/5/5

課程代號：TX175B001 Course Code 學分數：1 Credits	必選修：必修/全學年 Required/Elective: Required/Full Yr. 先修課程： Prerequisites
節次教室：T6(T2-412) T7(T2-412) T8(T2-412) Time/Location	
專業核心能力： Core Professional Competencies	
課程網址： Course Website	
課程宗旨： Course Objectives	
1. To introduce the student to the fundamentals physical observation and to the scientific method. 2. To acquaint the student with several basic quantitative techniques ,including gravimetric and volumetric measurement, care and use of laboratory equipment, and the safe use and handling of chemicals. 3. Each experiment includes : an introduction, experimental	
課程大綱： Outline of Lectures	
1. Course Introduction and Lab Cleaning 2. Determination of the Hardness of Water 3. Determination of Melting Point 4. Recrystallization 5. Preparation and Testing of Soap 6. Preparation of Aspirin 7. Hydrolysis of Aspirin 8. Hand Sanitizer Gel 9. Quantifying vitamin C 10. Preparing Neutral Non-soap Facial Cleanser and Shampoo 11. Recycling Aluminum from Aluminum Can 12. Separation and Identification of Proteins 13. Final exam	
授課方式： Method of Instruction	
講授 Lecture：30% 分組討論 Group discussion：0% 案例研討 Case study：0% 操做練習 Practical exercises：70% 講授 Lecture：%	
教科書： Textbooks	
參考書目：NA References	
修課須知：有助教TA Notice	
評量方式： Grading	

1. Attendance: 15%
2. Group on duty: 5%
3. Working attitude: 20%
4. Pre-lab Report + Post-lab Report: 30%
5. Final Exam: 30%

備註說明： NA
Notes