

課程資訊

課程名稱	化學工程實驗一 Chemical Engineering Laboratory (I)
開課學期	114-2
授課對象	Chemical Engineering Department
授課教師	Leigh Aldous
課號	ChemE3010
課程識別碼	504 32210
班次	023
學分	1.0
全/半年	Half-year
必/選修	Mandatory
上課時間	Wednesday 6,7,8,9 (13:20~17:20)
上課地點	Chemical Engineering Laboratory 105
備註	The experiment may cause class to end late; it is recommended not to schedule evening classes on the same day. Location: Chemical Engineering Building 105. Enrolment is automatically determined by the student number Total limit: 28 students.
課程簡介影片	
核心能力關聯	核心能力與課程規劃關聯圖

課程大綱

為確保您的權利,請尊重智慧財產權及不得非法影印

課程概述	This course aims to develop students abilities in fundamental unit operations, instrument operation, and data analysis in chemical engineering. Through systematic experimental practice, students will learn how to correctly use laboratory instruments, evaluate experimental errors, interpret experimental results, and write professional laboratory reports. The course emphasizes safe laboratory practices and teamwork in order to cultivate practical skills and problem-solving abilities for future work in the chemical industry or research fields.
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課程目標	<p>1. Experimental Skills: Become familiar with the operation and maintenance principles of commonly used instruments and equipment in chemical engineering.</p> <p>2. Problem Solving: Develop the ability to identify problems, analyze causes, and propose solutions through observation of experimental phenomena and data analysis.</p> <p>3. Teamwork: Learn to conduct experiments in groups and develop effective communication and collaboration skills.</p> <p>4. Safety and Ethics: Emphasize laboratory safety and professional ethics to ensure compliance with regulations and ethical standards in practical work.</p> <p>5. Data Organization and Report Writing: Accurately record, process, and summarize experimental data, and prepare laboratory reports using scientific methods.</p>	
課程要求		
預期每週課前或/與課後學習時數	<ul style="list-style-type: none"> - Several hours group work per week (each week has a pre-lab or post-lab group presentation) - Individually complete a written report on one experiment (ca. 10 hours, over 2 weeks) 	
Office Hours	Both Prof. Aldous and the Teaching Assistant are available throughout the duration of the afternoon lab class, including before and after (Wednesday 1pm-6pm). Other appointments should be arranged via email	
指定閱讀	Each experiment requires different textbooks; specific references and extensive supporting material are provided by the laboratory manual	
參考書目	n/a	
評量方式 (僅供參考)	University-wide grading details can be found here: https://www.dlc.ntu.edu.tw/assessinglearning/	
課程進度		
週次	日期	單元主題
無資料		