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：周芳仔

Instructor:FangYu Chou

課程名稱：界面化學

Course Title：Interfacial Chemistry

2026/11/3

課程代號： CH4100701 Course Code 學分數： 3 Credits	必選修：選修/半學年 Required/Electve:Elective/Half Yr. 先修課程： Prerequisites
節次教室： M10(IB-511-1) R3(IB-511-1) R4(IB-511-1) Time/Location	
專業核心能力： Core Professional Competencies	
課程網址： Course Website	
課程宗旨： Course Objectives	內容包括高分子材料介面介紹、薄膜製作、表面改質化學技術、表面鑑定技術，與相關介面科學在奈米材料與接著技術上之應用。 The content includes an introduction to polymer material interfaces, thin film fabrication, chemical surface modification techniques, surface characterization techniques, and the applications of related interface science in nanomaterials and adhesion technology.
課程大綱： Outline of Lectures	L1 Types of Surfactants, their Synthesis, and Applications L2 Environmental and Health Aspects of Surfactants L3 Two Fundamental Forces in Surface and Colloid Chemistry L4 Surfactant Self-Assembly: General Aspects and Spherical Micelles L5 Phase Diagrams L6 Surfactant Adsorption at Solid Surfaces L7 Polymers in Solution L8 Surface Active Polymers L9 Adsorption of Polymers at Solid Surfaces L10 Surface and Interfacial Tension L11 Microemulsions L12 Colloidal Stability L13 Wetting and Wetting Agents
授課方式： Method of Instruction	講授 Lecture：60% 分組討論 Group discussion：30% 案例研討 Case study：10% 操做練習 Practical exercises：0% 講授 Lecture：%
教科書： Textbooks	
參考書目： References	
修課須知： Notice	
評量方式： Grading	

Report: 20%
Quiz: 20%
Midterm: 30%
Final exam: 30%

備註說明：
Notes