



教學計劃表 Syllabus

課程名稱(中文) Course Name in Chinese		物理化學(一)			學年/學期 Academic Year/Semester		113/1		
課程名稱(英文) Course Name in English		Physical chemistry(I)							
科目代碼 Course Code		CHEM20600	系級 Department & Year	學二		開課單位 Course-Offering Department		化學系	
修別 Type		學程 Program	學分數/時間 Credit(s)/Hour(s)		3.0/3.0				
授課教師 Instructor		/張海舟							
先修課程 Prerequisite									
課程描述 Course Description									
化學熱力學									
課程目標 Course Objectives									
培養學生在物理化學領域中之專業知識									
系專業能力 Basic Learning Outcomes							課程目標與系專業能力相關性 Correlation between Course Objectives and Dept.' s Education Objectives		
A	具備化學基礎知識						●		
B	具備獨立思考及分析解決問題之能						●		
C	具備化學專業知						●		
D	具備執行化學實驗之能力						○		
E	具備國際視野與外語能力						○		
圖示說明Illustration：● 高度相關 Highly correlated ○中度相關 Moderately correlated									
授 課 進 度 表 Teaching Schedule & Content									
週次Week		內 容 Subject/Topics					備註Remarks		
1		Chapter 1 (The properties of gases)							
2		Chapter 1 (The properties of gases)							
3		Chapter 1 (The properties of gases)							
4		Chapter 1(The properties of gases) / Chapter 2 (The First Law)							
5		Chapter 2 (The First Law)							
6		10/17 mid-term 1							
7		Chapter 2 (The First Law)							

8	Chapter 3 (The Second and Third Laws)	
9	Chapter 3 (The Second and Third Laws)	
10	Chapter 3 (The Second and Third Laws)	
11	Chapter 4 (Physical transformations of pure substances)	
12	11/28 mid-term 2	
13	Chapter 4 (Physical transformations of pure substances) / Chapter 5 (Simple mixtures)	
14	Chapter 5 (Simple mixtures)	
15	Chapter 5 (Simple mixtures)	
16	Chapter 6 (Chemical equilibrium)	
17	1/2 final	
18	no class	

教學策略 Teaching Strategies

- ☒ 課堂講授 Lecture
 ☐ 分組討論 Group Discussion
 ☐ 參觀實習 Field Trip
 ☐ 其他 Miscellaneous:

教學創新自評 Teaching Self-Evaluation

創新教學(Innovative Teaching)

- ☐ 問題導向學習(PBL)
 ☐ 團體合作學習(TBL)
 ☐ 解決導向學習(SBL)
 ☐ 翻轉教室 Flipped Classroom
 ☐ 磨課師 Moocs

社會責任(Social Responsibility)

- ☐ 在地實踐 Community Practice
 ☐ 產學合作 Industry-Academia Cooperation

跨域合作(Transdisciplinary Projects)

- ☐ 跨界教學 Transdisciplinary Teaching
 ☐ 跨院系教學 Inter-collegiate Teaching

- ☐ 業師合授 Courses Co-taught with Industry Practitioners

其它 other:

學期成績計算及多元評量方式 Grading & Assessments									
配分項目 Items	配分比例 Percentage	多元評量方式 Assessments							
		測驗 會考	實作 觀察	口頭 發表	專題 研究	創作 展演	卷宗 評量	證照 檢定	其他
平時成績 General Performance	0%								
期中考成績 Midterm Exam	57%	✓							
期末考成績 Final Exam	33%	✓							
作業成績 Homework and/or Assignments	10%								
其他 Miscellaneous (_____)	0%								
<p style="text-align: center;">評量方式補充說明 Grading & Assessments Supplemental instructions</p> <p>成績計算： mid-term 1 (27%) mid-term 2 (30%) final (33%) homework (10%)</p> <p>請注意：</p> <ol style="list-style-type: none"> 作業遲交拒收。 點名3次不到不及格。 請假必須事先報備(請假3次為限)。 考試時，務必自行攜帶計算機。 <p style="text-align: center;">教科書與參考書目(書名、作者、書局、代理商、說明) Textbook & Other References (Title, Author, Publisher, Agents, Remarks, etc.)</p> <p>Physical Chemistry (12th Edition) Author: P.W. Atkins 台灣代理商: 滄海圖書 (趙竣 0932597322)</p> <p style="text-align: center;">課程教材網址(含線上教學資訊,教師個人網址請列位於本校內之網址) Teaching Aids & Teacher's Website(Including online teaching information. Personal website can be listed here.)</p> <p style="text-align: center;">其他補充說明 (Supplemental instructions)</p>									