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②图 i 東華大學 教學計劃表 Syllabus

		3人 子	二計劃衣	Sy 1 13	abus				
課程名和 Course Name	稱(中文) e in Chinese	鋼鐵冶煉學	ester	114/1					
	稱(英文) e in English	Steel metallurgy							
	代碼 e Code	MS56090	材料和	材料科學與工程學系					
	·別 /pe	選修 Elective	0/3.0						
	R教師 Fuctor	/紀渥德							
	修課程 equisite								
		課	程描述 Course	e Descript	cion				
		c knowledge abo ld like to work			and non-ferrous m y.	etals. 7	he class		
		課	程目標 Cours	se Objecti	ves				
希望藉由冶金質	實例,培養學生	對冶金熱力學之沒	寅算能力,並藉	由互動課程	呈設計,增加學生之多	冷與及對 言	果程的理解。		
系專業能力 Basic Learning Outcomes							程目標與系專業能 力相關性 relation between urse Objectives and Dept.'s Education Objectives		
		か理、化學及數學β c knowledge for			dvanced physical, gineering.				
具備材料科學的進階專業知識,並能應用於解決工程上之問題。Acquire required advanced professional knowledge for materials science and engineering, applicable in solving engineering problems.									
C 具備獨立									
具備專業道德及責任感,與良好的溝通及團隊合作的能力。Acquire professional morality and responsibility, and capability of quality communication and team cooperation.							•		
E 具備適當的英文能力,應用於學習與交流。Acquire English capability used for learning and interaction.							\bigcirc		
圖示說明Illustration : ● 高度相關 Highly correlated ○中度相關 Moderately correlated									
		授課進	度表 Teaching	g Schedule	& Content				
週次Week	l次Week 内容 Subject/Topics						精註Remarks		
1 II	Introduction								
2 Me	etals and alloys								
3 F:	Fire proof materials and metallurgical fuels								
4 P	ig iron	on							
5 P:	5 Pig iron								
6 S-	6 Steel metallurgy								

7	Steel metallurgy							
8	Steel metallurgy							
9	期中考試週 Midterm Exam							
10	Grey steel							
11	Grey steel							
12	Non-ferrous metallurgy - Al							
13	Non-ferrous metallurgy - Pb							
14	Non-ferrous metallurgy - Zn							
15	Non-ferrous metallurgy - Cu							
16	Powder metallurgy							
17	Metals working							
18	期末考試週 Final Exam							
教 學 策 略 Teaching Strategies								
✓ 課堂講授 Lecture								
其他Mis	其他Miscellaneous:							
	教學創新自評Teaching Self-Evaluation							
創新教學(Innovative Teaching)								
問題導口	向學習(PBL) ✓ 團體合作學習(TBL) ✓ 解決導向學習(SBL)							
翻轉教:	翻轉教室 Flipped Classroom 磨課師 Moocs							
社會責任(社會責任(Social Responsibility)							
在地實踐Community Practice 產學合作 Industy-Academia Cooperation								
跨域合作(Transdisciplinary Projects)								
一跨界教學Transdisciplinary Teaching 跨院系教學Inter-collegiate Teaching								
業師合授 Courses Co-taught with Industry Practitioners								
其它 other	r:							

學期成績計算及多元評量方式 Grading & Assessments									
配分項目	配分比例 Percentage	多元評量方式 Assessments							
Items		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(含出缺席) General Performance (Attendance Record)	15%								
期中考成績 Midterm Exam	20%								
期末考成績 Final Exam	25%								
作業成績 Homework and/or Assignments	15%								
其他 Miscellaneous (presentations)	25%								

評量方式補充說明

Grading & Assessments Supplemental instructions

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.)

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.)

The course material will be uploaded.

其他補充說明(Supplemental instructions)