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②國玄東華大學

課 綱 Course Outline

材料科學與工程學系國際組

中文課程名稱 Course Name in Chinese		材料機械性質					
英文課程名稱 Course Name in English		Mechanical Behaviors of Materials					
科目代碼 Course Code		MSD1150	班 別 Degree	博士班 Ph. D.			
修別 Type		選修 Elective	學分數 Credit(s)	3. 0	時 數 Hour(s)	3. 0	
先修課程 Prerequisite							
課程目標 Course Objectives							
This course equips students with a comprehensive understanding of the mechanical properties of materials, preparing them for future careers and research.							
系教育目標 Dept.'s Education Objectives							
1	建立專業知識基礎 Set the professional knowledge foundation						
2	培養專業實驗技能 Train the profes	養專業實驗技能 ain the professional experimental skill					
3	養成獨立研究能力 Insure capability of independent research						
4	養成優質社會人格 Form the positive social character						
5	開展國際視野 Develop global vision						
課程目標與第 力相關性 《 S 專業能力 Basic Learning Outcomes Basic Learning Outcomes Dept.'s Ed Objectives					cion Course res and s Education		
A	具備材料科學所需的進階物理、化學及數學的知識。 Acquire required advanced physical, chemical, and mathematic knowledge for materials science and engineering.				0		
В	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.						

С	具備獨立研究之能力。					
	Equipped with capabilities of independent research.					
	具備專業道德及責任感,與良好的溝通及團隊合作的能力。					
D	Acquire professional morality and responsibility, and					
	capability of quality communication and team cooperation.					
Е	具備適當的英文能力,應用於學習與交流。	\cap				
	Acquire English capability used for learning and interaction.					
圖示說明Illustration : ● 高度相關 Highly correlated ○中度相關 Moderately correlated						
課程大綱						
Course Outline						
	Courses in the mechanical behavior of materials are standard in both mechanical					
_	ineering and materials science/engineering curricula. These course	_				
usually, at the junior or senior level. This course provides an introductory treatment						
of the mechanical behavior of materials with a balanced mechanics—materials approach, which makes it suitable for both mechanical and materials engineering students. It						
covers metals, polymers, ceramics, and composites and contains more than sufficient						
1	information for a one-semester course. It therefore enables the instructor to choose					
the path most appropriate to the class level (junior- or senior-level undergraduate)						
and	and background (mechanical or materials engineering).					
資源需求評估(師資專長之聘任、儀器設備的配合・・・等)						
Resources Required (e.g. qualifications and expertise, instrument and equipment, etc.)						
Teachers with expertise in the courses offered; computers for data organization, copy						
machines, projectors.						
課程要求和教學方式之建議						
Course Requirements and Suggested Teaching Methods						
Lecture/Group Discussion						
其他						
Miscellaneous						