

**100 學年第 1 學期材料科學導論二(Introduction to Materials Science II)
課程綱要**

課程名稱：(中文)材料科學導論二 (英文) Introduction to Materials Science II		開課時間	M5M6R7R8
		科號 Course Number	10010ESS 250100
任課教師：歐陽汎怡 老師	學分	3	開課教室 工科 406
先修科目或先備能力：建議先修習材料科學導論一			
課程說明(Course Description)： This course is to introduce fundamental concepts in materials science. You will learn about material structure, how structure dictates properties, and how processing can change structure.			
指定用書(Text Books)	"Materials Science and Engineering: An Introduction, ", W.D. Callister, Jr. and D.G. Rethwisch, 8th edition, John Wiley and Sons, Inc. (2010).		

教學要點概述：

1. 教學方式(Teaching Method): 投影片(上網)教學及隨堂筆記 **Course Website:** LMS 數位學習系統 <http://lms.nthu.edu.tw/>
2. 成績考核(Evaluation) :
(1) quizzes :10% (2) homework :20% (3) Midterm:30% (4) Final:40%

3.教學進度表		週次
章節	內容	
Chapter 12 &13	Ceramics: structures, characteristics, application and processes	Ww 1, 2 & 3
Chapter 14 &15	Polymer: structures, characteristics, application and processes	Ww 3, 4 & 5
Chapter 16	Composites	Ww 5 & 6
Chapter 17	Corrosion and degradation of materials	Ww 7 & 8
	Midterm	Ww9
Chapter 18	Electrical properties	Ww 9, 10 &11
Chapter 19	Thermal properties	Ww 12 & 13
Chapter 20	Magnetic properties	Ww 14 & 15
Chapter 21	Optical properties	Ww 16 & 17
	Final Exam	Ww 18