

103 學年第 1 學期 半導體材料在能源科技之應用 Semiconductor in Energy Technologies 課程綱要

課程名稱：（中文）半導體材料在能源科技之應用		開課單位		半導體專班		
（英文）Semiconductor in Energy Technologies		永久課號		ISE5203		
授課教師：吳樸偉						
學分數	3	必/選修	選修	開課年級	*	
先修科目或先備能力：none						
課程概述與目標：						
This course covers possible applications of semiconducting materials in a variety of energy-converting schemes, particularly in photovoltaics and photoelectrochemical devices. A broad range of materials will be introduced and discussed for specific applications. The course attempts to provide a solid fundamental so students can appreciate relevant energy technologies.						
教科書（請註明書名、作者、出版社、出版年等資訊）		Lecture notes will be provided electronically by TA.				
課程大綱		分配時數				備註
單元主題	內容綱要	講授	示範	習作	其他	
教學要點概述：						
1.學期作業、考試、評量						
Midterm and Final (both in open book format)；Midterm: 50 %、Final: 50 %						
2.教學方法及教學相關配合事項(如助教、網站或圖書及資料庫等)						
助教：TBD；Office: 工六 507B 室；55345						
師生晤談	排定時間	地點		連絡方式		
	Friday 3:30 pm-5:30 pm	Room 312, Engineering VI		5131227 or ppwu@mail.nctu.edu.tw		
每週進度表						
週次	上課日期	課程進度、內容、主題				
1	9/20/2014	Introduction to Energy Technologies I				
2	9/27/2014	Introduction to Energy Technologies II				

3	10/04/2014	Introduction to Energy Technologies III
4	10/11/2014	Introduction to Solar Energy and Devices I
5	10/18/2014	Introduction to Solar Energy and Devices II
6	10/25/2014	Introduction to Solar Energy and Devices III
7	11/01/2014	Spring Break-Class Cancelled
8	11/08/2014	Introduction to Solar Energy and Devices IV
9	11/15/2014	Introduction to Solar Energy and Devices V
10	11/22/2014	Take-home Mid-Term Examination
11	11/29/2014	Photo-Electrocatalytic Energy Generation I
12	12/6/2014	Photo-Electrocatalytic Energy Generation II
13	12/13/2014	Batteries, Fuel Cells, and Supercapacitors I
14	12/20/2014	Batteries, Fuel Cells, and Supercapacitors II
15	12/27/2014	Batteries, Fuel Cells, and Supercapacitors III
16	1/03/2015	Batteries, Fuel Cells, and Supercapacitors IV
17	1/10/2015	New Ideas and Innovation
18	1/17/2015	Take-home Final Examination

※ 請同學遵守智慧財產權觀念及勿使用不法影印教科書。

備註：

1. 其他欄包含參訪、專題演講等活動。
2. 請同學遵守智慧財產權觀念及勿使用不法影印教科書。

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