課程簡介 Course Introduction

開課班級 Department	電機工程學系
授課方式 Instructional Method	課堂教學、中文
課程代號 Course Reference Number	182012
課程名稱(中文) Course Title (Chinese)	新穎太陽能電池
課程名稱(英文) Course Title (English)	Novel Solar Cells
學分數/時數 Credit Hours	3/3
必(選)修 Requirement / Elective Course	選修
授課老師 Instructor	盧陽明

課程目標 Learning Objectives

Give the whole idea of basic solar cells and advanced solar cells.

先修 (前置)課程 Prerequisite

Physics, Chemistry. Materials science

課程大綱 Course Syllabus

Week Unit Instructional Method/Teaching Style References or Related Grading 1 Introduction to solar cells 2 Basic concept of solar cells(1) 3 Basic concept of solar cells(2) 4 Silicon based solar cells(1) 5 Silicon based solar cells(2) 6 3-5 family solar cells(1) 7 3-5 family solar cells(2) 8 DSSC (1) 9 DSSC(2) 10 DSSC(3) 11 Mid term report 12 OPV(1) 13 OPV(2) 14 OPV(3) Organic-Inorganic		·····			
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	14	OPV(3)			
solar calls(1)	16	Organic-Inorganic			
Solal Cells(1)	12	solar cells(1)			

16	Organic-Inorganic
	solar cells(2)
17	Other advanced solar
	cells
18	Final report

單一課程對應校能力指標程度

The Degree to Which Single Course Corresponds to School Competence

編號	校核心能力	符合程度
No.	School Core Competencies	Degree of conformity
1	道德力 (Morality)	3
2	自學力 (Self-learning)	4
3	創造力 (Creativity)	5
4	溝通力 (Communication)	4
5	就業力 (Employability)	5

單一課程對應系能力指標程度

The Degree to Which Single Course Corresponds to Department Competence

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1	No.	Category	Department Core Competencies	Degree of conformity
	01	系所	具備專業知識運作及運用之能力	5
	02	系所	發掘問題、實驗分析及驗證之能力	4
	03	系所	創新思考開發之能力	4
	04	系所	協調合作、領導團隊與管理規劃之能力	4
	05	系所	中英文寫作與簡報之能力	4
	06	系所	強化國際觀與國際交流之能力	4

單一課程對應院能力指標程度

The Degree to Which Single Course Corresponds to College Competence

編號	院核心能力	符合程度
No.	College Core Competencies	Degree of conformity
1	語文能力	4
2	溝通與合作能力	4
3	創新與實踐能力	4
4	專業知能	5

教學方法 Teaching Method

教學方法	百分比
Teaching Method	Percentage
講述	60.0
影片欣賞	15.0
討論	15.0
個案研討	10.0
總和 Total	100.0

成績評量方式 Grading

評量方式	百分比
Grading	Percentage
書面報告	20.0
個人口頭報告	60.0
課堂參與	10.0
出席狀況	10.0
總和 Total	100.0