朝陽科技大學 097學年度第1學期教學大綱
Green Architecture 綠建築

當期課號	7712	Course Number	7712
授課教師	郭柏巖	Instructor	KUO,PO YEN
中文課名	綠建築	Course Name	Green Architecture
開課單位	建築及都市設計研究所碩士在職專班二A	Department	
修習別	選修	Required/Elective	Elective
學分數	3	Credits	3
課程目標	提昇建築在社會中的領導地位，並順應世界永續建築的發展，本課將研討美國綠建築指標之真髓！在室內環境、洪水處置與節能設計上，充分運用設計策略來達到環境科技與生態保育的互動與整合。	Objectives	Recent successful public acceptance of the LEED (Leadership in Energy and Environmental Design) rating system has generated vast interests on specific issues such as indoor air quality, storm water management etc… represent the cutting edge of environmental technology and ecological concern in architecture. These concerns expand our vision to the impact that construction industry has on health of the planet, and focus our attention on the health problem associated with the contemporary built environment. Future architects will need to acquire expertise to address effectively these issues on all aspects of design. This class will offer a detailed introduction to issues of human health and environmental sustainability in architectural design. The course will consist of a combination of lectures, seminar discussions of assigned investigations and readings and short analysis of architectural design outcomes and performances. The course will be oriented toward achieving a basic level of competence of technical and ecological literacy relevant to design applications, and will also encourage students to explore and investigate subjects of their interests to built up their knowledge and to produce a guideline for sustainable design.
教材	(1)Architecture without architects, Bernard Rudofsky。被建築使遺忘的建築,林憲德譯 (2)建築風土與節能設計---亞熱帶氣候的建築節能計畫, 林憲德, 1997, 詹氏書局 (3）熱濕氣候的綠色建築計畫, 林憲德, 1996, 詹氏書局 (4)城鄉生態, 林憲德, 1999, 詹氏書局 (5)Solar Power (The evaluation of sustainable Architecture) [Prestel] (6)DWELLINGS(THE VERNACULAR HOUSE WORLDWID), OLIVER,PAUL[PHAIDON PRESS] (7)Green Buildings Pay, B. Edwards, 1998, London: E & FN Spon. (8)Green Architecture: Design for an Energy-Conscious future, Brenda and R. Valve, 1991, London: Thames and Hudson Ltd. (9)Energy and Environment in Architecture: A Technical Design	Teaching Materials	(1)Architecture without architects, Bernard Rudofsky。被建築使遺忘的建築,林憲德譯 (2)建築風土與節能設計---亞熱帶氣候的建築節能計畫, 林憲德, 1997, 詹氏書局 (3）熱濕氣候的綠色建築計畫, 林憲德, 1996, 詹氏書局 (4)城鄉生態, 林憲德, 1999, 詹氏書局 (5)Solar Power (The evaluation of sustainable Architecture) [Prestel] (6)DWELLINGS(THE VERNACULAR HOUSE WORLDWID), OLIVER,PAUL[PHAIDON PRESS] (7)Green Buildings Pay, B. Edwards, 1998, London: E & FN Spon. (8)Green Architecture: Design for an Energy-Conscious future, Brenda and R. Valve, 1991, London: Thames and Hudson Ltd. (9)Energy and Environment in Architecture: A Technical Design

	Guide, N. Baker and K. Steemers, 2000, London: E & FN Spon. (10)Architectural Design for Tropical Regions, G. Salmon, 1999, New York: Wiley. (11)美國LEED官方網站：http://www.usgbc.org/		Guide, N. Baker and K. Steemers, 2000, London: E & FN Spon. (10)Architectural Design for Tropical Regions, G. Salmon, 1999, New York: Wiley. (11)美國LEED官方網站：http://www.usgbc.org/
成績評量方式	(1)平時成績（20%） (2)期中考（30%） (3)期末報告（50%）	**Grading**	(1)Attendance 20% (2)Mid-term 30% (3)Final-Report 50%
教師網頁	http://163.17.25.11/discuz/		
教學內容	本課程有四大主題： 第一單元介紹：美國與台灣的綠建築系統、台灣綠建築九大指標的評估與案例及手法介紹 第二單元介紹：建築採光與照明設計、日照原理及氣候分析 第三單元介紹：風土建築與綠建築的關係、住宅能源與生命週期分析、建築節約能源與材料 第四單元介紹：以台灣本土生態環境與熱濕氣候爲題，分組討論並製作期末專題報告 順應世界永續建築的發展，本課將研討美國綠建築與台灣綠建築評估系統之比較。並反應本土氣候之限制以及滿足基本的健康與舒適之居住條件下，如何應用綠建築技術在「環境綠美化、室內環境及建築節能」設計上，以達到環境科技與生態保育的互動與整合，作爲提升居住環境品質以及生態建築永續經營之理念。	**Syllabus**	There are four topics in this lecture: Part Ⅰ：LEED and EEWH evaluation system、EEWH introduction Part Ⅱ：Building Lighting and Daylight design. Part Ⅲ：Vernacular Architecture and Energy Conservation Design of Architecture、Life cycle in Residential Part Ⅳ：Group Discussion. Recent successful public acceptance of the LEED (Leadership in Energy and Environmental Design) rating system has generated vast interests on specific issues such as environmental green,indoor air quality and building energy saving etc… represent the cutting edge of environmental technology and ecological concern in architecture. These concerns expand our vision to the impact that construction industry has on health of the planet, and focus our attention on the health problem associated with the contemporary built environment. This class will offer a detailed introduction to issues of human health and environmental sustainability in architectural design. The course will consist of a combination of lectures, seminar discussions of assigned investigations and readings and short analysis of architectural design outcomes and performances. The course will be oriented toward achieving a basic level of competence of technical and ecological literacy relevant to design applications, and will also encourage students to explore and investigate subjects of their interests to built up their knowledge and to produce a guideline for sustainable design.