

Global Learning Semesters

Course Syllabus

Course: ARCH-465 Sustainable Design

Department: Design

Host Institution: University of Nicosia, Nicosia, Cyprus



Course Summary		
Course Code	Course Title	Recommended Credit Hours
ARCH-465	Sustainable Design	2
Semester Offered	Contact Hours	Prerequisites
Please contact us	42-45	Senior Standing
Department	Level of Course	Language of Instruction
Design	Upper Division	English

Course Description

The course studies the human and social impact of the built environment upon the inhabitants of that environment: physically, emotionally and psychologically. Contemporary perspectives on the relationship between human behavior, designed environments and energy efficiency are examined. The course explores the implications on those relationships for the purpose, nature and future direction of design education, design research and design practice. Students become aware of design factors affecting indoor comfort and explore concepts, structures and techniques that lie behind the realization of energy conscious design.

Prerequisites

Senior Standing

Topic Areas

- Introduction to Indoor Comfort
- Layout for Energy Savings
 - Solar gains
 - Ventilation
 - Cooling
- Building elements design for energy saving
 - Walls
 - Windows
 - Doors
 - Floors/Roofs
- Interior Planning for Day lighting
- Furnishings and Finishes
- Case Studies

Readings and Resources

Recommended Reading

- Cotton-Winslow, (1995), Environmental design: Architecture and technology, PBC International NY
- Vale, (1991), Green architecture: design for an energy-conscious future, Little Brown and company UK
- Roaf, S (2001) Eco House: A Design Guide; Architectural Press UK
- Hagan, S (2001) Taking Shape: A New Contract Between Architecture & Nature; Architectural Press UK
- Edwards, B (1998) Sustainable Architecture; Arch Press UK
- Berge, B (2000) The Ecology of Building Materials; Architectural Press UK
- Muneer, T (1997) Solar Radiation and Daylight Models for the Energy Efficient Design of Buildings; Arch Press UK