



#### Professional (CPD) Workshops Environmental and Sustainable Design

The Department of architecture, The Chinese University of Hong Kong is organizing a number of workshops related to the captioned topic in the coming academic year (2005-2006). They are part of our MSc offering and are also designed as CFD for Professionals working in the field wishing to learn more about the subject. Workshops available in 2005-2006 are:

Bioclimatic Design **Professor Baurch Givoni, UCLA, USA 2-5pm 16 Sept** 2005

Selective Environment – case studies **Professor Dean Hawkes, Cambridge University, UK 2-5pm 21 Oct** 2005

Daylighting Design in Cities I **Professor Peter Tregenza, Sheffield University, UK 2-5pm 28 Oct** 2005

Daylighting Design in Cities II **Professor Edward Ng, CUHK, HK 2-5pm 4 Nov** 2005 (also **2-5pm 17 Mar** 2006)

Urban Climatic Mapping and Design **Professor Lutz Katschner, Kassel University, Germany 2-5pm 25 Nov** 2005 (also **2-5pm 2 Dec** 2005)

Building Environmental Performance Assessment **Professor Raymond Cole, UBC, Canada 2-5pm 13 Jan** 2006

Total Performance Integration Professor Lam Khee Poh, Carnegie Mellon University, USA 2-5pm 10 Feb 2006

Eco-material and life Cycle Assessment **Professor Adrian Pitts, Sheffield University, UK 2-5pm 17 Feb** 2006

Green Architecture **Professor Brenda Vale, University of Auckland, New Zealand 2-5pm 7 Apr** 2006

The half day workshop costs HK\$600 each. If you wish to reserve a seat, please send in a request to MSc-CPD, Department of Architecture, CUHK, Shatin, NT, Hong Kong, with your name, profession, organization, contacts and a cheque payable to **The Chinese University of Hong Kong**.

Further information, please visit www.sustain-cuhk.info OR contact Esther Ho (T:26096586)

MSc Programmes, Department of Architecture, CUHK, Shatin, NT, Hong Kong

Fax to 26035267 Attn: Esther Ho



I would like to enroll the following workshop(s)

Please tick	
uek	Bioclimatic Design Professor Baurch Givoni, UCLA, USA 2-5pm Friday 16 Sept 2005
	Selective Environment – case studies <b>Professor Dean Hawkes, Cambridge University, UK</b> 2-5pm Friday 21 Oct 2005
	Daylighting Design in Cities I <b>Professor Peter Tregenza</b> , <b>Sheffield University</b> , <b>UK</b> 2-5pm Friday 28 Oct 2005
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	Urban Climatic Mapping and Design <b>Professor Lutz Katschner</b> , <b>Kassel University</b> , <b>Germany</b> 2-5pm Friday 25 Nov 2005
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Green Architecture Professor Brenda Vale, University of Auckland, New Zealand 2-5pm Friday 7 Apr 2006	
I am mailing you a cheque, payable to "The Chinese University of Hong Kong", the workshop fee of HK\$	
	Name Profession
Telephone Fax	
	E-mail Company
Address	





#### Bioclimatic Design Professor Baurch Givoni, UCLA, USA

This course introduces the principles of Bioclimatic building design, so as to maximize thermal comfort and minimize the need for energy for heating and for cooling of the buildings. The effect of various architectural decisions on the indoor climate is discussed in details. The effect of any design feature, such as that of building's orientation, is not "fixed" but depends on the design details of other design features, such walls' color and windows' shading conditions. These quantitative interactions between the effects of the various design details will be discussed in details in the class.

## Selective Environment – case studies Professor Dean Hawkes, Cambridge University, UK



The art of architecture not only embraces the fundamental need for shelter from the natural elements, it also has other purposes and meanings. The 'selective' environment is an approach to environmentally responsive architectural design that seeks to make connections between the technical application of building sciences and the sustenance of cultural identity at a time of rapid global change. In this it stands in opposition to the technologically dominated approach of much contemporary design practice. This might be termed the 'exclusive' environment. Through the development of a number of critical case studies of buildings worldwide, the course aims to explore a number of themes in the field of environmental design and to relate theory to practice.



Daylighting Design in Cities Professor Peter Tregenza, Sheffield University, UK



# Daylighting Design in Cities II Professor Edward Ng, CUHK, HK

This course introduces the principles of designing with daylight and then discusses how the use of daylight in buildings is part of an overall approach to sustainable design. After reviewing basic principles of lighting, the syllabus covers the concept of a daylight climate and its relationship with other environmental factors; it describes how electric lighting, control systems and windows are interlinked and considers these together. Design exercises cover several building types and a range of climates, with a special emphasis on urban buildings in warm regions. The practical work ranges from visual design and quick calculations to the use of computer software for lighting simulation and rendering.

### Urban Climatic Mapping and Design Professor Lutz Katschner, Kassel University, Germany

Urban climate analysis are a major tool for a sustainable urban development. Ventilation conditions heat island aspects have a great influence on health and humans well being. In the same time air pollution is effected by the meteorological parameters. Main focus in the course is given to both: the thermal aspect and air pollutions problems. There will be an introduction to urban climatology and how to use results for planning. The link between urban planners, architect and urban climatologist is described and the planning level defined. Introduction to urban climate maps and there use. Presentation of different investigation tools such as calculations or even assumptions. Presentation of results.





# Building Environmental Performance Assessment Professor Raymond Cole, UBC, Canada

The past decade has seen increasing interest in building environmental performance assessment. This course will characterize the fundamental differences between "green" buildings and "sustainable" buildings and introduce some of key methods currently used to assess their performance. It will examine the underlining principles, scope, structure and limitations of these methods and provide students with a working knowledge of their application both as design and assessment tools.

### Total Performance Integration Professor Lam Khee Poh, Carnegie Mellon University, USA



The environmental design of buildings should be considered holistically. Decisions made regarding concern design issues will affect performance of other issues. Based on AIA's Handbook of Building Systems, the course introduces a structure of how this could be achieved. The six mandates of environmental design will be dissected using the three performance criteria. Examples will be given on the concepts introduced.

# Eco-material and life Cycle Assessment Professor Adrian Pitts, Sheffield University, UK

The purpose of this short course will be to address issues of sustainable construction and choice of environmentally sensitive building materials. It is designed as a weekend workshop event as a means to introduce students to the concepts surrounding 'green' and ecological building materials. There will be some opportunities for in-depth analysis and discussion of the concepts and analytical techniques involved and participants will be expected to take an active role both in discussion and also in undertaking several small scale activities during the course of the workshop. It is the aim of the workshop that participants will become familiar with concepts and terminology and also understand and be able to utilise a range of assessment tools that are particularly relevant to this topic.



### Green Architecture

Professor Brenda Vale, University of Auckland, New Zealand

This course first introduces the background and development of green and sustainable development. It then examines the environmental impact of building activities on the eco-system through a number of more established environmental concepts (for example, embodied energy, carbon dioxide emission, energy life cycle assessment, environmental impact assessment). Tools and methods for assessing building's environmental impact will be critically evaluated and applied through case studies.