ARCH 5731C
NATURE IN ARCHITECTURE:
HISTORY AND DESIGN

2014-15 2nd Term
Instructor: Thomas Chung (Email: tchung@cuhk.edu.hk)

Time: Tuesdays  5:30 – 8:15 pm
Venue: YIA 409

DESCRIPTION

This course explores the theme of nature and its engagement with architecture through the dual topic of ecology and design, and with a dual emphasis on thinking and making.

The background of how the natural is entwined with the architectural will be outlined by considering ideas, movements and works in history. These include aspects relating nature and topography to human settlement and habitation in architecture include agriculture, gardens, and productive landscapes. Using urban, architectural and design examples and case studies, we will consider and critique the development of human habitation on earth, from fearing to harnessing the ferocity of nature, from appreciating the fecundity of its rhythms to using ingenuity to manipulate, extract and eventually concoct and design comprehensive environments, and increasingly artificial, surrogate and virtual worlds.

We will cover topics selected from: sustainable land use and planning and design; ecological architecture and urbanism; bio-mimicry and biophilic or organic design; radical architecture as ecology; hybridization of nature into architecture and neo-materialism in design. Students will develop and study in-depth selected existing practices and latest advances in sustainable topics and technologies: for example ecological design, sustainable architecture, vertical greening, community farming, metropolitan agrotecture, etc.

To complement lecture and seminars, there will be experiential learning and workshop culminating in a project with design components. The aim is twofold. First, to let students understand, reflect and critique current state of play in the inevitable trend of “sustainability”. Second, to encourage students to respond concretely to the contemporary ecological imperative, to speculate on alternative thinking and design possibilities through an experiential exercise.

OBJECTIVES

- To understand fundamental themes and histories of how architecture engages nature
- To on the broader contexts of ecological design in history and culture
- To reflect on ecologically motivated movements, ideas and related theoretical writings
- To translate and realize ecological ideas through experiential learning and alternative designs

ASSESSMENT SCHEME

1. Participation    20 %
2. Workshop presentation   30 %
3. Project + Report    50 %
COURSE FORMAT

Lectures, seminar workshop, and in-class presentations by students. Attendance required.

Tuesdays 5:30 – 8:15 pm

REFERENCES


ACADEMIC HONESTY

Attention is drawn to University policy and regulations on honesty in academic work, and to the disciplinary guidelines and procedures applicable to breaches of such policy and regulations. Details may be found at the following website: [http://www.cuhk.edu.hk/policy/academichonesty/](http://www.cuhk.edu.hk/policy/academichonesty/)

With each assignment, students will be required to submit a statement that they are aware of these policies, regulations, guidelines and procedures.