

AR-506

**Sustainable Japanese architecture and landscape**

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Cursus	Sem.	Type
Architecture	MA2, MA4	Opt.

Language of teaching	English
Credits	3
Session	Summer
Semester	Spring
Exam	During the semester
Workload	90h
Weeks	12
<b>Hours</b>	<b>2 weekly</b>
Lecture	2 weekly
<b>Number of positions</b>	

**Summary**

This course focuses on the circulation of the imaginary between cultures. It shows how major Western architects, landscape designers, painters and sculptors have been inserting sustainable architectural and landscape Japanese devices and notions into their designs since the 19th century.

**Content**

Firstly, the course provides an introduction, by seven lectures, to the major sources of inspiration, devices, and notions that 20th c. Westerners selected when studying Japanese pre-modern architectural and landscape projects. Secondly, students (group work-individual work on request) will propose a sustainable innovation grounded in a specific Japanese source of inspiration: a device (*tatami* or *shoji* set, natural stone layout, etc.) or a notion (*ma*, miniaturisation, indirect light etc.), or combination of both. They may also propose a technical transposition done with other materials and manufacturing techniques.

*Lectures on Japanese sustainable sources of inspiration followed by discussions*

- 1 Introduction: Sustainability - Program - Architecture: history & specificities
- 2 Discovery, assimilation and creation: Josiah Conder opens the Way
- 3 Materials and built-in furniture: Charlotte Perriand
- Guest speaker: Prof. Hon. Manfred Speidel Aachen Architecture School *Climate and a Biological Foundation of Culture - Some observations on Bruno Taut's Architectural Theory*
- 4 Garden types - Designing a garden
- 5 Gardens, landscapes, public spaces: Isamu Noguchi
- 6 Landscape architecture enlightening stone and wood: Dimitris Pikionis
- 7 Zen gardens mystification: Bernard Huet in Japan 1964 *On photography - Against interpretation*

*Student work: developing a Japanese source of inspiration into a contemporary proposal*

- 9 Preliminary proposal: max 500 words + free format illustration - choice between sketches, axonometry, perspective, collage, plans or scale model (Group work - Individual work on request)
- 10-11 Direct supervision by lecturer
- 12 Final proposal - Workshop if number of students allows it

**Keywords**

Sustainability, interculturality, innovation, architecture, garden, landscape, public space, Shinto, Zen

**Learning Prerequisites****Recommended courses**

Japon contemporain BA5  
Contemporary Japan MA1-MA2

### Important concepts to start the course

Sustainability in architecture and landscape design

Modes of use of an architectural and landscape device: citation, replica, adaptation, abstraction

### Learning Outcomes

By the end of the course, the student must be able to:

- Create a sustainable design based on a device or notion
- Transpose a device or notion from a Japanese pre-modern context into a contemporary context
- Compose traditional wood and stone devices with innovative contemporary design methods
- Argue the viability of her/his proposal

### Transversal skills

- Demonstrate a capacity for creativity.
- Access and evaluate appropriate sources of information.
- Take responsibility for environmental impacts of her/ his actions and decisions.
- Demonstrate the capacity for critical thinking

### Teaching methods

Lecture and discussion + proposal supervision

### Expected student activities

Students are expected to attend all lectures.

When provided, course readings must be completed before the lecture, to ensure comprehension and facilitate discussion.

Students are encouraged to prepare questions and discuss them in class after the lecture.

Students are expected to become specialists of one device or notion.

Students will write, illustrate and present a proposal for a Japanese architectural / landscape device or notion developing its potential for a sustainable project.

For the workshop - if the number of students allows it-, students will discuss their proposal.

### Assessment methods

Analysis of a device or notion showing its potential for sustainability : maximum significance with minimum text and illustration. (Max 500 words illustrated in the most appropriate manner: students choose between sketches, axonometry, perspective, collage, plans or scale model)

Preliminary proposal: 50% of the grade

Final proposal: 50% of the grade

### Supervision

Office hours                      Yes

### Resources

#### Bibliography

These general readings are complemented by articles and other references available on the moodle for each device and notion addressed.

Deanna MacDonald: *Eco living Japan Sustainable ideas for living green* Tuttle, 2015

Kazuo Nishi, Kazuo Hozumi: *What is Japanese Architecture?* Kodansha, 1997

William H. Coaldrake: *Tools and Japanese architecture The way of the carpenter*, Weatherhill. 1990  
Josiah Conder: *Landscape Gardening in Japan*. Leyy & Walsh, 1893  
Marc Treib: *A Guide to the Gardens of Kyoto*. Kodansha, 2018  
Philippe Bonnin : *Vocabulaire de la spatialité japonaise*. CNRS, 2014  
Benoît Jaquet : *Le charpentier et l'architecte*. PPUR, 2019  
Irène Vogel Chevroulet *La création d'une japonité moderne*. EUE, 2010

### Ressources en bibliothèque

- [Eco living Japan / MacDonald](#)
- [What is Japanese Architecture? / Nishi](#)
- [Tools and Japanese architectur](#)

### Moodle Link

- <https://go.epfl.ch/AR-506>