

## **AAF1216 ALTRE - VIAGGI DI ISTRUZIONE, CONVEGNI, SEMINARI**

29904-INGEGNERIA PER L'AMBIENTE E IL TERRITORIO [L-270 - ORDIN. 2019] - L-7  
AA 2019-2020

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## **“ECOLOGICAL URBANISM”**

This course, conducted entirely in English by Architect Tom Rankin (BA, Princeton, MArch Harvard), introduces students to the problems of sustainable urban design and some of the innovative (and traditional) opportunities and techniques to reduce the environmental impact caused by urban development.

### **Schedule**

Wednesdays 16:00

Via Eudossiana, 18 Roma Aula 4

First meeting: Wed 11 March 2020

### **Course Programme**

The course is structured thematically in three phases.

- The **first phase will consist of weekly slide lectures** followed by occasional seminar discussions based on readings and viewings of related video presentations. Students will begin to research and prepare material for thematic presentations introduced below.
- Thematic presentations will be **presented orally with slides during the second phase**, with the results also being compiled into a **written report**.
- During the **final phase** there will be a **short oral exam** to evaluate students' comprehension of the lectures and readings.

#### **GRADING**

The final evaluation will be based on the student's performance on the presentation (40%), written paper (40%), and oral exam (20%).

**Excellence points** will be granted to those students performing outstandingly in the course.

#### **THEMES**

1. **Water**. Where does it come from, where does it go, how is it managed? What effect does the recognition of the limits of clean water have on urban development?

2. **Green Space.** What is the role of green space in the city? How can it be defended and improved?
3. **Urban Fabric.** How does the choice of where to site buildings, how to plan and regulate development, impact the city's performance?
4. **Energy.** Where does it come from and how is it managed? What are the true costs vs. the economic costs? What strategies exist to reduce the energy consumption (and subsequent emissions) related to urban development?
5. **Waste.** What happens to the solid and liquid waste produced by human inhabitation? Where does it go, how is it managed, and how can it be reduced or eliminated, or at least turned into a resource?
6. **Transportation.** How do people move around the city and between cities and what are the environmental and personal costs?
7. **Community.** What role do stakeholders play in the development of more environmentally sustainable cities? How is participation essential to ecological urbanism?

While the lectures will address the city of Rome as a laboratory for ecological urbanism, the topic of the student presentations this year will be the sustainability initiatives of European cities of your choice: **Trieste, Belfast, Stockholm, Bilbao, or Berlin.**

We are particularly interested in Buffer Zone's, Rivers and Urban Islands which have impacted the development of urban fabric and strategies for reconnecting (focus of the international workshop: Interrupted Cities [<https://interruptedcity.wordpress.com>]).

In groups of 4 or 5, you will choose one city and select from the 7 themes and investigate ways that the city has addressed them. Look for examples of successful urban revitalization projects, best practices, creative solutions to ecological challenges such as flooding or pollution.

Each student in the group will address a discrete phenomenon to research and present, but these components must be coordinated by the group to comprise a unified presentation.

Presentations will be given orally in the classroom, in English, with the support of digital slides (power point, etc.). Each student should speak for between 4 and 5 minutes.

Written reports must be between 1500-2000 words per student, clearly indicating the author of each section. Illustrations and graphics should be clearly labeled and all quotations must be credited to their source. Reports should be formatted A4 and submitted digitally in pdf format at the time of the presentation.

## **Bibliography**

The principal articles read in the course will be taken from:

Rankin, Tom. Rome Works: An Architect Explores the World's Most Resilient City. Peruzzi Press, 2015. [romeworks.info](http://romeworks.info)

Rifkin, Jeremy. The Third Industrial Revolution. 2010. \*Available on-line

Brown, Lester. Plan B 3.0: Mobilizing to Save Civilization. W.W. Norton & Co. 2008.

Mitchell, William J. Me++ The Cyborg Self and the Networked City. MIT Press, 2004.

Ecological Urbanism, Mohsen Mostafavi, (Editor), Lars Müller Publishers; 1 edition (May 1, 2010)

Sassen, Saskia. "Seeing Like a City" in Burdett, Ricky, ed. The Endless City. Phaidon. 2007

William McDonough and Michael Braungart, Cradle to Cradle. New York, NY: Northpoint Press, 2002.

Lynch, Kevin. "The Waste of Place" in Places: Vol. 6: No. 2. 1990.

Berger, Alan. "Urban Land is a Natural Thing to Waste" in Harvard Design Magazine Fall 2005/Winter 2006.

Stuart, Tristram, Waste: Uncovering the Global Food Scandal. London: Penguin, 2009. p. 220-231.

Timothy Beatley. Planning for Sustainability in European Cities. The Sustainable Urban Development Reader. London and New York: Routledge. 2004.

Sennet, Richard. "The Open City" in Burdett, Ricky, ed. The Endless City. Phaidon. 2007.

Cervero, Robert. "Transit and the Metropolis: Finding Harmony" in Wheeler, Stephen M. and Timothy Beatley. The Sustainable Urban Development Reader. London and New York: Routledge. 2004.