

# GENERATIVE AND RE-GENERATIVE DESIGN

Repairing the Earth – Repairing the City

Life and Beauty of the Earth

University of Oregon Portland – Urban Architecture

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*“Regenerative design is a process oriented systems theory based approach to design. The term “regenerative” describes processes that restore, renew or revitalize their own sources of energy and materials, creating sustainable systems that integrate the needs of society with the integrity of nature. The basis is derived from systems ecology.”* Jon Tilman Lyle: *Regenerative Design for Sustainable Development*.

In this seminar we will focus on generative and regenerative design, especially for urban architecture, urban structure, neighborhoods, and cities. While we love the success of the city, we also have to recognize that the city, or more specifically the success of urbanization, with its ever-increasing size and development, starts to pose a dilemma: Cities are becoming our primary habitat, but urbanization in its present form also might endanger the very life and beauty of the earth.

Cities are built only on small proportion of the earth’s land surface (2-3%), but their ecological footprint covers much of the land and sea of the earth. Urban population uses the bulk of the world’s resources, and they are contributing dramatically to pollution, environmental damage, loss of biodiversity, and climate change.

In this seminar we will study the negative affects of urbanization and what to do about it. We will also study regenerative processes and development that may be able to counteract the negative factors that current urbanization brings with it. In particular will we study the new and emergent paradigm of ‘Regenerative Development’ in contrast to the previous paradigms of the ‘International Negotiation Paradigm’ and the ‘Ecological Modernization Paradigm.’ The meeting format consists of lectures, discussions, readings, one or two debates, city walks, project visits, and student presentations.

**TERM PROJECT:** Students will first determine what they consider the largest problems in the world, in particular with regard to urban, architectural, and environmental issues. Problems will be connected to particular projects and issues within our discipline and field. Finally, each student individually will develop a project and proposals that help to solve the larger problem under investigation. Students can work on Projects or Papers.

Texts include primary readings. Assigned readings will be discussed at each discussion session led by the instructor and students. Primary texts include: Jon Tilman Lyle: *Regenerative Design for Sustainable Development*. Herbert Girardet: *The Regenerative City*. Thomas Sieverts: *Cities without Cities*. Crisna du Plessis. “Towards a regenerative paradigm for the built environment.” Text on ‘The Anthropocene,’ and more...



Illustration: Our beloved Earth from Space - [About.com/Images/Earth From Space](http://About.com/Images/Earth/EarthFromSpace)

