Life and Beauty on Earth: “The purpose of all architecture, the purpose of its spatial-geometric organization, is to provide opportunities for life-giving situations. The central issue of architecture, and its central purpose, is to create those configurations and social situations, which provide encouragement and support for life-giving comfort and profound satisfaction – sometimes excitement – so that one experiences life as worth living. When this purpose is forgotten or abandoned, then there is indeed no architecture to speak of.” *Battle for the Life and Beauty of the Earth*, OU Press 2012, p. 2. (Alexander, Neis, Moore)

1. Introduction of Project Topic: REPAIRING THE EARTH: The idea for this advanced architecture studio or thesis design studio is to understand and analyze major large-scale world-wide problems and connect them to particular problems and locations in the urban structure, neighborhoods, parks, and buildings. The combined perspective of these two features will form the basis of your thesis research and your thesis design studio project. The main purpose of the studio is to contribute and help to preserve life and beauty on earth in a way that also our children and children’s children will be able to continue to enjoy life and beauty for a long time in the future.

REPAIRING THE CITY: Most of these large world-wide problems find their way into the structures of our cities. ‘Repairing the Earth’ therefore in our context of urban architecture and urban design also means to help ‘Repairing the City.’

World-wide problems, Earth Repair, and Urban Design/Urban Building Projects

When we look at a number of large scale problems in the world, we ask the question how can we contribute to solve these problems by means of urban design and urban architecture projects. Here are some large problems and parallel projects as examples from previous studio works and also projects from well-known architects:

- **Population Growth** - Incremental Housing for 3000 People in India (Sri Balaji)
- **Urbanization** - Densification of Old City in Budapest (Arpad Takacs)
- **Climate Change** - Floating Buildings for Rising Sea Levels (Emily Steen)
- **Economic Collapse** - Design for Athens Young Unemployed (Alina Prassas)
- **Poverty/Hunger** - Urban Farming for Kumasi, Ghana, Africa, (Ericka Brendel)
- **Terrorism and War** - Berlin Reichstag (Foster) New York Ground Zero (Libeskind)
Selection of Projects: For the selection of your own project, you should be able to connect your particular project to a larger world wide problem, i.e. your project is rebuilding a town that was devastated by a Tornado. Your large problem is Natural Disaster and Tornados. Or you can also start with a large-scale problem you are interested in and then find a project within that topic, i.e. your large-scale problem is how to save energy, your project maybe the design of a walkable urban neighborhood and a net-zero building within the neighborhood. In this way you may be able to contribute to the repair of the earth and the repair of the city with an urban and architectural project.

Illustration: Contemporary Housing on a Bunker from WWII

2. Urban Architecture Portland and Purpose of the Advance Design Studio
The Urban Architecture Program in Portland focuses on urban architecture, urban design, and urban sustainability and wholeness in Portland and other cities in the US and abroad. This is a thesis studio with the general topical focus, and the overall project selected by the instructor. The design studio is preceded by a mandatory fall term thesis preparation research seminar 407/507 with the studios in the winter quarter 2016 and spring quarter 2016. Also a few preparatory exercises in the summer of 2015 are required. The emphasis of the studio is to design an urban project that contributes to the solution of a larger problem in the world, and to develop a comprehensive urban architectural project within this context, backed by rigorous research efforts, theoretical explorations, and creative work. Students will select a problem and project location, study it, and redesign all or part of it. There are three components to this design thesis. The first part is a research seminar on your thesis topic and project. The second part is an urban design effort of your project that can be done either in groups collectively or individually. The third component deals with the design of an individual building project within the developed urban design context. The building needs to be designed fully and comprehensively by the individual student.

3. (Re)Generative Design: Seminar Arch 407/507 (Fall 2015 required)
The fall seminar will focus on the theoretical and conceptual issues of the studio. The overall design theme is to explore (re)generative processes and their potential application in planning, design and building processes in cities, urban districts and buildings. All thesis students will participate in the seminar by investigating particular aspects of generative and regenerative urban design and responsive urban architecture in different experiments, tests, and simulations of design processes following particular principles, set rules, criteria and parameters. Each student will study one particular case and present it in the seminar. A ‘Thesis Statement’ and a ‘Program Document’ are produced as part of a ‘Research Report.’
Generative or Re-generative Design is an applied form of generative science that tries to understand and conceptualize the world and its complex structure as a generative or regenerative process. Generative Design attempts to formulate limited parameters, principles, and rules that interact with each other to create richness of life and behavior, and endless variation of form, shape and place. Generative design explores the design process also as an (re)emergent process at several levels, including but not limited to physical, artistic, and social cultural factors. Communal or community generative processes are of specific interest here. These kinds of processes might be more and more important in solving our world processes in the future.

Hans Joachim (Hajo) Neis, Ph.D. Director of Portland Urban Architecture Research Lab PUARL. Professor Neis teaches urban architecture and urban theory with emphasis on city building and the art of building. He has previously taught at the University of California, Frankfurt University, the Prince of Wales Urban UDTF, the Technical University of Dresden, the University of Duisburg-Essen, and Meiji University in Tokyo. His main interest in research and design include, the question of quality and value in architecture and urban structure and the question of process and sequence that create quality in buildings and the urban fabric. He is also one of the founding directors of the ‘Collaborative for Inclusive Urbanism CIU.’ As a practicing and licensed architect and planner for over 30 years, he has designed more than 200 buildings and built 50 buildings. He works together with the organization CES and also heads his own architecture office Hajo Neis Atelier (HNA) in Berkeley, and Germany with projects in the US, Japan, and Europe. Dr. Neis has published in English, German, Japanese and Greek Journals, and he is also a co-author of several books: 'A New Theory of Urban Design', Oxford University Press, NY 1987, Schule des Sehens, Fachhochschulverlag, Frankfurt, 2000, and 'Battle for the Life and Beauty of the Earth', Oxford University Press, NY, 2012. Related to Studio Topic: Neis taught the Fukushima Summer Workshop 2013 in Japan with Meiji University and is working on Tsunami Urban Evacuation Projects on the Oregon Coast.

Illustration: Our beloved Earth from Space - About.com/Images Earth From Space

Notes: Students are strongly recommended to take the ‘Human Context and Programming’ class Arch 540 (Yosa Huggins) as well as ‘Principles of Urban Design’ Arch 4/535 (Gerry Gast)
City Repair facilitates artistic and ecologically-oriented placemaking through projects that honor the interconnection of human communities and the natural world.
Because of the refugee problem in Europe, we will pay particular attention to this problem in our PUARL Research Seminar 401/601.