

ARCH 4/510 Spring 2020

Building Pathology: Preservation of Historic Materials

CRN 37091/37092 | Friday 4/3, 4/17, 5/1, 5/15, 5/29 9:00-11:50am and
Thursday 4/30 5:00-7:50pm | WSB 442

Instructors: Rachelle Byarlay (RByarlay@wje.com) / Sylvan Cambier (SCambier@wje.com)
+ other guest presenters



Citation: Photo by Rachelle Byarlay

This course introduces the concepts, key issues, and best practices for historic materials and systems such as masonry, concrete, windows, and curtain walls, architectural metals, stucco, and plaster. It is designed for students who desire to understand common building deterioration conditions and contribute to evaluating the causes of those conditions as well as interventions to help preserve heritage buildings. The course will be taught by an interdisciplinary team with guest lectures covering the range of professionals involved in making decisions about technical evaluations and treatment recommendations.

Course Objectives:

At the completion of this course, students will be able to:

- Identify and describe the history and composition of typical building materials and systems.
- Describe and assess common deterioration modes.
- Identify various building materials and components and assess their condition.
- Evaluate and contribute to determinations of appropriate repair, replacement, and stabilization techniques.
- Understand the value of interdisciplinary teams to evaluate deterioration and establish framework for interventions.

The course will include class presentations by the instructors and guests, discussions based on readings, take home exam, written assignments, and field trips.

Course Requirements and Evaluation:

Concepts, including conservation, structural analysis, and laboratory testing, are covered without assumed or prerequisite knowledge. The course is intended for historic preservation, architecture, and landscape architecture students interested in gaining a familiarity with how buildings have been constructed in the past and how building repair technologies and approaches can aid in their ongoing use and preservation. In addition to the intermittent Friday meetings, the class will meet on Thursday, April 30, from 5pm-7:50pm. Evaluation is based on class participation, midterm examination, in class exercises, and individual final paper.



UNIVERSITY OF
OREGON

College of Design

School of Architecture and Environment
70 NW Couch Street, Floor 4R, Portland, OR 97209
503-320-3718 | archenvironment.uoregon.edu