ARCH 484/584 Architectural Design (6 credits)
Mid-Rise Sustainable Housing Seminar/Studio
Winter 2013, Monday and Wednesday 1:00 – 4:50 pm, Friday 2:00 - 4:50 pm
UO White Stag Building in Portland

Instructor: Amy Miller Dowell, AIA
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Friday Open Office Hours: 1:00 – 2:00 pm and by appointment

This is one of a three-part series of courses in Adaptive Reuse.* This studio/seminar will focus on the architectural design of mid-rise sustainable housing in an historic building utilizing the Secretary of Interior Standards and Guidelines for Rehabilitation.

Housing as a Viable Adaptive Reuse Option
Housing often serves as a catalyst for revitalization by bringing more residents to an area and attracting additional development. Residential uses are compatible with many historic buildings and benefit from locations where community amenities and infrastructure systems are in place.

The studio will evaluate land use/zoning/change of use, housing types and user groups, mixed-use options, residential program and design development, and key building code issues related to residential adaptive reuse.

The Most Green Building is an Existing Building
"Preservation saves energy by taking advantage of the non-recoverable energy embodied in an existing building and extending the use of it" - ASSESSING the ENERGY CONSERVATION BENEFITS of HISTORIC PRESERVATION: Methods and Examples, Advisory Council on Historic Preservation.

Students will weigh alternatives for sustainable environmental systems and materials for the historic building adaptive reuse, examining both existing and new options for compatibility.

Rehabilitating Historic School Buildings
Older and historic schools demonstrated civic pride in education and were of high quality design and construction. Easy to walk to and culturally important, these institutions served the community and bound many generations. In the last decade, historic schools have been shuttered or demolished at alarming rates due to changing student demographics and confusion about the techniques and economics of rehabilitation. A concerted national effort is underway to encourage rehabilitation of historic schools, first for educational purposes, or if not possible, for adaptive reuse.

The historic Washington High School in East Portland’s Buckman Neighborhood will serve as the base for studio exploration. Reviewing the “certified rehabilitation” building analysis generated by students of the previous Fall Studio, the class will develop design options to address adaptive reuse. See next page.
Course Objective
• Develop knowledge of design issues related to creating a certified rehabilitation project.
• Acquire an understanding of housing design and technical issues related to historic rehabs.
• Understand compatibility issues related to sustainability and historic resources.
• Examine adaptive rehabilitation from various decision-making viewpoints including those of development, architectural design and compliance.

Methodology
To help students navigate the Studio/Seminar, this course will unfold in progressive phases. Students will first respond to the project’s broader theoretical issues and urban context, then develop a specific adaptive reuse concept, and finally explore the building envelope, environmental systems and material choices. The class will include group discussions, desk crits, and an oral and graphic midterm and final presentation organized by individual and team partnerships.

Architecture Students May Take This Course
ARCH students will have further analysis of building design and details, and a greater number of graphic deliverables.

*Three Part Adaptive Reuse Series
AAAP 4/510 “Adaptive Reuse of Historic Buildings and Landscapes” Fall Class taught by Henry Kunowski (underway): will cover the broader subject of Adaptive Reuse from a mini studio approach with a focus on the analytical tools used to scope a property for a “certified rehabilitation”. Students who have not taken this course may still enroll in the Winter term studio and benefit from the class’ research about Washington High School.

AAAP 4/510 “Mid-Rise Sustainable Housing” Winter Class taught by Amy Miller Dowell (afternoon, subject of this course): will examine Washington High School for a housing adaptive reuse studio. The course will review reuse options and weigh housing type alternatives for best compatibility. Then it will focus on the land use/zoning/change of use, housing program development, building code issues, and sustainable building systems and materials. The studio will examine the problem from various decision-making viewpoints including those of development, architectural design and compliance.

AAAP 4/510 & ARCH 4/510 “Preservation Economics” Winter Class taught by Jessica Engeman (morning): will focus on the economics of Adaptive Reuse with a focus on real estate development issues, project feasibility analysis, and historic preservation incentive programs. The federal Investment Tax Credit process will be fully covered with a focus on the Part 2 application.

The end result of this three-course approach will give students a solid background in crafting a certified rehabilitation project and understanding financial feasibility through pro forma analysis.