

Graduate Architecture Course Waiver Requirements

A46 4280 – Architectural History I

Course Description: This lecture course will introduce major historical narratives, themes, sites, and architects from ancient Greece to the end of the Baroque period. We will take an extended look at the dawn of the modern period in the 15th and 16th centuries through a global perspective, turning eastward from Renaissance Europe to the Ottoman, Mughal, Chinese, and Japanese empires. The great chronological and geographic span of this course will be pulled together around the themes of 1) classicism and its subsequent reinterpretations, and 2) the pursuit of the tectonic ideal. Our aim is to recognize how these ideological pursuits of modern architecture evolved out of longer historical processes. We will also pay close attention to major sites of landscape and urban-scale work. Requirements will include a mid-term, final exam, and a series of short papers.

Students requesting a waiver must submit a transcript and syllabus. The syllabus should clearly describe session topics, readings and assignments. The previous course(s) must include significant coverage on all of the following topics: Greco-Roman Classicism, European Middle Ages, Renaissance+Baroque, and 18th/19th century Neoclassicism and the Industrial Revolution. Students are also expected to have been exposed to a significant amount of non-Western content, such as Pre Columbian, Islamic, South Asian, or East Asian. The previous course must also include a substantial research-based writing assignment.

A46 4284 – Architectural History II

Course Description: An introductory survey of the history and theory of architecture and urbanism in the context of the rapidly changing technological and social circumstances of the last one hundred and twenty years. In addition to tracing the usual history of modern architecture, this course also emphasizes understanding of the formal, philosophical, social, technical, and economic background of other important architectural directions in a global context. Topics range from architects' responses to new conditions in the rapidly developing cities of the later nineteenth century, through early twentieth-century theories of perception and social engagement, to recent efforts to find new bases for architectural interventions in the contemporary metropolis.

Students requesting a waiver must submit a transcript and syllabus. The syllabus must clearly describe session topics, readings and assignments. The previous course(s) must have covered 20th century architecture, and not be a survey of a particular country or region, such as American Architecture or Architecture in China.

A46 445 – Building Systems

Course Description: Building Systems will examine the performance and properties of building materials, both traditional and new, through an analysis of assemblies and related systems. Investigations of wood, masonry, steel and concrete and the integration of relevant building systems will provide the fundamental structure for the course. All systems will be investigated relative to their architectural purpose, impact on the environment, relationship to culture/context, technical principles and will also consider manufacturing, construction, our profession and the society in which we practice. Moreover, the course will also examine the performance characteristics of contemporary enclosure technology and explore the impact these technologies are having on design thinking.

Although we will focus primarily on the aforementioned topics, we will also identify and consider the impact of other parameters on design and performance such as: building codes, role of the profession, health and life safety, systems integration, sustainability and industry standards. The course strives to provide students with a sound familiarity and understanding of traditional building systems in wood, steel and concrete; as well as the skills necessary to represent these systems. The course also seeks to expose students to the material and poetic potential of these technologies related to the making of architectural environments.

Students requesting a waiver must submit a copy of their transcript with a passing grade for the equivalent course(s), a course syllabus, a course calendar and the title of the course-required text. Translations are required if the original documents are not in English. Students should also submit examples of course work (name, date and course identification should be visible for all work):

- Required - Wall Section(s)*
- Optional/Preferred - Ramps & Accessibility assignments, other relevant assignments/writings/exams/quizzes

***If documentation of a wall section, detail drawing or detail model is not available this work must be specifically addressed as a requirement/deliverable in the syllabus.**

A46 438 – Environmental Systems I

Course Description: Environmental Systems I is the foundation course in the architectural technology sequence. This course addresses the relationship between buildings and an expanded idea of context, including ideas of environment, landform, energy, material and space. The class places an emphasis on each student developing their own attitude toward architectural sustainability, its role within the design process, and its relationship to architectural form.

The class is organized around the themes of climate, site and energy. The theme of climate addresses macro- and micro-climates, and the roles they have in developing architectural form through 'passive' strategies. The theme of site expands the idea of the architectural project to examine landform, position, access and region. The theme of energy looks at architecture as both embodied energy and a consumer of energy, to understand how the architect helps to control and direct these flows at macro and micro levels.

Two goals for the class are to provide students with ways of thinking about and of working with issues of sustainability which can inform their design practice, and to equip them with the basic knowledge needed to continue within the technology sequence.

Students requesting a waiver must submit a transcript and syllabus, as well as course exercises or completed work. Students may be asked to complete a quiz related to course content.

Some students may only receive partial waivers. Students who receive a partial waiver are required to complete the Site Planning portion of Environmental Systems I. This 1-credit course is listed as A46 4381 Environmental Systems I – Site Planning.

A46 439 – Environmental Systems II

Course Description: We as architects have to analyze and address complex issues and relationships, synthesize them, and then make them manifest through clear design strategies. Building systems must reconcile: solar heat gain, glare control, daylight levels, thermal insulation, ventilation, acoustics, air quality, structure and fabrication - all in relation to the scale and comfort of the human body. The development of environmental systems into a clear, comprehensive, and elegant design solution cannot be an afterthought; it must be a synthesized and integral part of the design process, with a clear strategy that operates at multiple scales. Building upon the passive strategies explored in Environmental Systems I, this course will lay the foundation for the integration of active environmental systems with enclosure, space, and the requirements for human occupation. This will be done through the study of climate, air, temperature, water, light, sound, and energy. Each topic will be assessed against problems, principles, possibilities and potential. This course focuses on how important it is to consider active systems as part of an integrated design strategy addressing both FORM and PERFORMANCE throughout the design process. Prerequisites: Environmental Systems I & Building Systems

Students requesting a waiver must submit a transcript and syllabus. Students must also complete a quiz related to course content. It is recommended that students review previous course material prior to waiver meeting

Some students may only receive partial waivers. Students who receive a partial waiver are required to complete the Acoustics portion of Environmental Systems II. This 1-credit course is listed as A46 4391 Environmental Systems II – Acoustics.

A46 447A and 448A – Structures I and II

Course Description - Structures I: Statics and Strength of Materials through Beam and Column Theory. Loads are defined and states of stress are identified and analyzed. The context of structural behavior is identified and optimal structural behavior and material efficiency structural design is reviewed. Form-active, bulk-active and vector active structural options are explored relative to the transference of load along the length of structural members. The course applies structural theory to the analysis and design of structural members - beams, trusses, arches and columns.

Course Description - Structures II: Continuation of Arch 447A with consideration of the effects of forces on structural members of various materials. Introduction to the design of structural members in steel, reinforced concrete and wood.

Students requesting waivers must submit a transcript and course syllabus. If no syllabus is available, a student must submit completed coursework, text, handouts or other course material.

Course waivers will only be granted for an equivalent course or combination of courses completed satisfactorily to meet NAAB-accredited student performance criteria. Equivalence is measured in terms of both content and assignments. All waived courses will be filled with general elective credits.