Woodbury University

Interim Progress Report for Year Five

November 30, 2020

Contents

- 1. Instructions and Template Guidelines
- 2. Executive Summary of the Two Most Recent NAAB Visits: 2009 and 2015
- 3. Template
 - a. Progress in Addressing Not-Met Conditions and Student Performance Criteria identified in the review of the Interim Progress Report for Year 2
 - (1) Please note that the responses contained herein include both the revised IPR #1 and the additional response for IPR #2. While revised IPR #1 was submitted in 2018, it was not accepted. We have included it here to demonstrate continuity in our efforts to meet and exceed the expectations of NAAB. After conferring with NAAB (Ellen Cathy) we chose to exceed the page limit in order to provide the committee with comprehensive responses. Thank you for your understanding.
 - b. Progress in Addressing Causes of Concern
 - c. Changes or Planned Changes in the Program
 - d. Summary of Preparations for Adapting to 2020 NAAB Conditions
 - e. Appendix (include revised curricula, syllabi, and one-page CVs or bios of new administrators and faculty members; syllabi should reference which NAAB SPC a course addresses; samples of required student work).
- 4. Requirements for the Use of Digital Content in Interim Progress Reports

1. INSTRUCTIONS AND TEMPLATE GUIDELINES

Purpose

Continuing accreditation is subject to the submission of interim progress reports at defined intervals of 2 years and 5 years after an eight-year term of continuing accreditation is approved.

This narrative report, supported by documentation, covers four areas:

- 1. The program's progress in addressing not-met Conditions and Student Performance Criteria (SPC) from the Interim Progress Report Year 2 review.
- 2. Progress in Addressing Causes for Concern.
- 3. Changes or Planned Changes in the Program.
- 4. Summary of Preparations for Adapting to 2020 NAAB Conditions.

Supporting Documentation

- The narrative should describe in detail all changes in the program made in response to not-met Conditions and Student Performance Criteria, including detailed descriptions of changes to the curriculum that have been made in response to not-met SPC that were identified in the review of the Interim Progress Report Year 2. Identify any specific outcomes expected to student performance. Attach new or revised annotated syllabi identifying changes for required courses that address unmet SPC.
- 2. Evidence of student work is only required to address deficiencies in the following cases: (1) If there are any SPCs that have not been met for two consecutive visits; (2) If there are three not-met SPCs in the same realm in the last visit.
 - Provide three examples of minimum-pass work for each deficiency and submit student work evidence to the NAAB in electronic format. (Refer to the "Guidelines for Submitting Digital Content in IPRs" for the required format and file organization.)
 - All student work evidence must be labeled and clearly annotated so that each example crossreferences the specific SPC being evaluated and shows compliance with that SPC.
- 3. Provide information regarding changes in leadership or faculty membership. Identify the anticipated contribution to the program for new hires and include either a narrative biography or one-page CV.
- 4. Provide additional information that may be of interest to the NAAB team at the next accreditation visit.

Outcomes

IPRs are reviewed by a panel of three: one current NAAB director, one former NAAB director, and one experienced team chair.¹ The panel may make one of three recommendations to the Board regarding the interim report:

- 1. Accept the interim report as having demonstrated satisfactory progress toward addressing deficiencies identified in the report of the Interim Progress Report Year 2.
- 2. Accept the interim report as having demonstrated progress toward addressing deficiencies but require the program to provide additional information (e.g., actions taken to address deficiencies). This report shall be due within six weeks of the receipt of this outcome report.
- 3. Reject the interim report as having not demonstrated sufficient progress toward addressing deficiencies and advance the next accreditation sequence by at least one calendar year, thereby shortening the term of accreditation. In such cases, the chief academic officer of the institution will be notified, and a copy of the decision sent to the program administrator. A schedule will be determined so that the program has at least six months to prepare an Architecture Program Report. The annual statistical report (see Section 9 of the 2014 Conditions) is still required.

¹ The team chair will not have participated in a team during the year in which the original decision on a term of accreditation was made.

Deadline and Contacts

IPRs are due on November 30. They shall be submitted through the NAAB's Annual Report System (ARS). As described in Section 10 of the 2015 NAAB Procedures for Accreditation "...the program will be assessed a fine of \$100.00 per calendar day until the IPR is submitted." If the IPR is not received by January 15 the program will automatically receive Outcome 3 described above. Email questions to forum@naab.org.

Instructions

- 1. Reports shall be succinct and are limited to 40 pages/20 MBs, including supporting documentation.
- 2. Type all responses in the designated text areas.
- 3. Reports must be submitted as a single PDF following the template format. Pages should be numbered.
- 4. Supporting documentation should be included in the body of the report.
- 5. Remove the #4 "Requirements for the Use of Digital Content in Interim Progress Reports" pages before submitting the interim progress report.

2. EXECUTIVE SUMMARY OF THE TWO MOST RECENT NAAB VISITS: 2015 and 2008 (BArch)/ 2012 (MArch)

CONDITIONS NOT MET

2015 VTR	2008 (B. Arch) & 2012 (M. Arch) VTR		
None	6 Human Resources (B. Arch)		
	10 Financial Resources (B. Arch)		

STUDENT PERFORMANCE CRITERIA NOT MET

2015 VTR	2008 (B. Arch) & 2012 (M. Arch) VTR
A.4 Technical Documentation (B. Arch)	13.14 Accessibility (B. Arch)
A.7 Use of Precedents (M. Arch)	13.23 Building Systems Integration (B. Arch)
A.9 Historical Traditions & Global Culture (M. Arch)	13.28 Comprehensive Design (B. Arch)
B.1 Pre-Design (B. Arch & M. Arch)	A.9 Historical Traditions & Global Culture (M. Arch)
B.2 Accessibility (B. Arch & M. Arch)	B. 2 Accessibility (M. Arch)
B.3 Sustainability (M. Arch)	C. 1 Collaboration (M. Arch)
B.4 Site Design (M. Arch)	
B.7 Financial Considerations (B. Arch)	
C.1 Collaboration (M. Arch)	
C.5 Practice Management (B. Arch)	

CAUSES OF CONCERN

2015 VTR	2008 (B. Arch) & 2012 (M. Arch) VTR
Knowledge Range (B. Arch & M. Arch)	Digital Technology Infrastructure (B. Arch)
M. Arch Degree Program (B. Arch & M. Arch)	Faculty Licensure (B. Arch)
Administrative Uncertainty (B. Arch & M. Arch)	Future Perspectives (M. Arch)
Enrollment and Funding (B. Arch & M. Arch)	Financials (M. Arch)
	Student Performance Criteria Concerns (M. Arch)

3. TEMPLATE

Interim Progress Report Year 5

Woodbury University School of Architecture B. Arch. [160 semester hours plus 160 work hours] M. Arch. [pre-professional degree plus a minimum of 68 graduate credits] M. Arch. [non-pre-professional degree plus a minimum of 93 graduate credits]

Year of the previous visit: 2015

Please update contact information as necessary since the last APR was submitted.

Chief administrator for the academic unit in which the program is located:

Name:	Ingalill Wahlroos-Ritter, FAIA		
Title:	Dean, Schoo of Architecture		
Email Address:	ingallill.wahlroos-ritter@woodbury.edu		
Physical Address:	7500 Glenoaks Blvd., Burbank, CA 91504-1052		

Any questions pertaining to this submission will be directed to the chief administrator for the academic unit in which the program is located.

Chief academic officer for the Institution:

Name:	Randy Stauffer
Title:	Sr. Vice President of Academic Affairs
Email Address:	randy.stauffer@woodbury.edu
Physical Address:	7500 Glenoaks Blvd., Burbank, CA 91504-1052

Text from the previous VTR and IPR Year 2 Review is in the gray text boxes. Type your response in the designated text boxes.

I. Progress in Addressing Not-Met Conditions and Student Performance Criteria a. Progress in Addressing Not-Met Conditions

N/A

b. Progress in Addressing Not-Met Student Performance Criteria

A.4 Technical Documentation (B. Arch)

2015 Visiting Team Assessment: Evidence is primarily presented for B. Arch in Arch 464 – Systems Integration, and for M. Arch in Arch 547 – Building 4. All secondary course evidence was evaluated. B. Arch student evidence did not contain outline specifications indicating the ability to identify materials, assemblies, and components as they relate to design development and project estimating/management. M. Arch student evidence presented outline specifications as adequate examples of integrative responsibilities in building design.

Woodbury University, 2017 Response: Studio briefs are being reconsidered to include projects that help students focus upon the identification of materials, assemblies, and components.

Woodbury University, 2017 Response (Revised):

UNDERGRADUATE PROGRAM

Undergraduate students are introduced to technical documentation in their second year of the 5-year BArch program in ARCH 250 Professional Practice 1 and demonstrate it in their fourth year in ARCH 464 Systems Integration and ARCH 487 Studio 4A (Integrative Design Studio).

ARCH 250 is a required course in which students are required to produce a construction drawing set for a small (approx. 2500 sf) single-family residence or other single program building. Students are introduced to technical drawings and are given a beginning understanding of outline specifications as they relate to material assemblies, systems, components, and to the architect's integrative responsibilities in building design. Students model the building using Revit (or another Building Information Modeling software system) and then develop a construction drawing set where they learn construction drawing conventions. These drawing sets include material assemblies, door and window schedules, and rudimentary specifications keyed into the drawings.

ARCH 464 Systems Integration and ARCH 487 Studio 4A are co-requisite courses taught by a single cohort of faculty. ARCH 464 Introduces students to the interrelationships of the properties of materials, structures, environmental systems, building envelope systems, construction technology, building cost control, and life-cycle costs as they influence design-development and decision-making. This course has a large 'consultant' budget that is used to bring field experts into the classroom to present best practices through case-study projects. This year the consultants include a mechanical engineer, a structural engineer, a passive design specialist, and two façade specialists. Together in this pair of courses, students generate synthetic design proposals that integrate structure, building systems, and material assemblies. The design proposals are documented in intensively articulate models and drawings. While previously, students have been asked to build models that illustrate and identify the assembly of materials, systems, and components for their comprehensive studio projects and to produce drawings with specification numbers keyed in that refer to written specification sections (based upon BIM modeling), student are now required to also produce a written outline specification that directly refers to their drawings and models.

More generally, ARCH 464 Systems Integration, is now being modeled after the successful graduate studio ARCH 547 Building 4 (Integrative Design Studio) to include an assignment that demonstrates students' ability to produce written outline specifications. This is supported by assignments in ARCH 450 Professional Practice 3 in the undergraduate program, and ARCH 620 Professional Practice 1 in the graduate program.

Woodbury University, 2020 Response:

UNDERGRADUATE PROGRAM

From 2017 through 2020 ARCH 250 has continued to be a course where students generate outline specifications for project estimating and management purposes. In this course, students produce a comprehensive drawing set that identifies materials, assemblies, and components. The drawing sets includes room schedules, window schedules, and door schedules which serve to introduce students to techniques and standards for quantifying building materials and components for estimating and timeline management purposes.

From 2017 through 2020 ARCH 464 and 487 continued to stress the identification of materials, assemblies, and components as they relate to design development. In Fall of 2020, a revised BArch curriculum was implemented that expands the integration of materials, assemblies, and components across design studios throughout the curriculum so that students are better prepared for the complexities of the comprehensive design studio that occurs in the fourth year of the BArch program.

This Spring semester studios in the undergraduate program will address building integration through multiple lenses. ARCH 102: Studio Two will integrate materials, components, and construction process in the design of a building. ARCH 202: Studio Four will integrate mechanical, plumbing, electric, and circulatory systems in the design of a building. ARCH 302: Studio Six will integrate enclosure systems and structural systems in the design of a building.

The fourth year of the BArch program is dedicated to the production of a year-long comprehensive design project. In the fall semester of fourth year students enroll in ARCH 401: Studio Seven and ARCH 421: Building Four: Introduction to Systems Integration. ARCH 401 and ARCH 421 are co-requisite courses that are taught by the same faculty to a single cohort of students. In ARCH 401: Studio Seven students cite, diagram, and specify building systems and evaluate the systems against the design, economics, and performance objectives of other projects. In ARCH 421: Building Four: Introduction to Systems Integration, students specify mechanical systems including heating, cooling, lighting, and acoustics and evaluate their environmental performance. Beginning in 2021, students in the second semester of fourth year will enroll in ARCH 422: Building Five: Advanced Systems Integration. In this course students will produce a detailed drawing set that expands upon and specifies the systems and assemblies embedded in the comprehensive studio.

A.7 Use of Precedents (M. Arch)

2015 Visiting Team Assessment: This condition is primarily addressed in Arch 464 – Systems Integration at the undergraduate level, and in Arch 547 – Building 4 at the graduate level. The course syllabi, assignments, and student work from Arch 464 – Systems Integration, in conjunction with Arch 487 – Studio 4A Comprehensive Design, as well as from Arch 281 – Studio 2A and Arch 283 – Studio 2B, demonstrate the ability to examine and comprehend the fundamental principles present in relevant precedents and to make choices regarding the incorporation of such principles into architecture and urban design projects.

The course syllabi, assignments, and student work from Arch 547 – Building 4 do not meet this criterion overall. The projects reviewed from this and related studio courses consistently demonstrate the ability to examine and comprehend the fundamental principles present in specific precedents; however, the work presented did not provide evidence of the ability to make choices regarding the incorporation of such principles into architecture and urban design projects.

Woodbury University, 2017 Response: Given the number of SPC relates to ARCH 487 and ARCH 547, the use of precedents is being considered in other studios.

Woodbury University, 2017 Response (Revised):

GRADUATE PROGRAM

The integration of precedents is addressed in ARCH 584 Studio 2 (Living Organizations), ARCH 547 Building 4 (Environmental Systems Integration) and ARCH 589 Studio 4 (The Total Building).

In ARCH 584 Studio 2, precedents illuminate the relationship between program, building codes, and formal typology. In this studio students design a multi-unit housing project. Precedent studies demonstrate approaches to massing, circulation, and use creating a palette of housing strategies from which a student refers using informed choices. In this way, students are required to incorporate principles from their precedents iteratively into their final designs.

ARCH 547 Building 4 is co-taught with ARCH 589 Studio 4 and together form the comprehensive design semester of the MArch program. ARCH 547 has been revised to include a large catalog of relevant precedents and resources in sustainable zone design (e.g., the 2030 palette). Students are required to incorporate principles from the precedents that they have studied into their final designs, explicitly indicating in their drawings the direct lineage of the precedent and its transformation and/or incorporation in their final project. Here, precedents illuminate the interrelationship between building systems, building forms, and interior environments, and the principles learned from the precedent studies inform the development of the buildings structure, enclosure, and siting strategy.

Woodbury University, 2020 Response:

GRADUATE PROGRAM

As stated in the 2017 revised response, ARCH 584: Graduate Studio Two, ARCH 547: Building 4 and ARCH 589: Graduate Studio Four incorporate the understanding gleaned from precedents into the generation and evaluation of a studio project.

In ARCH 584: Graduate Studio Two, precedent projects are introduced as a means of understanding formal and spatial qualities of architecture, often centered on a specific typology. In one year, the typology was housing, in another it was a museum. The studio begins with a precedent analysis that identifies the characteristics of a building mass, form, and organization in relation to a building type. The characteristics identified in the precedent analysis are translated through diagram into a set of design operations that are used to generate and evaluate a new project.

ARCH 547: Building 4 and ARCH 589: Graduate Studio Four are co-requisite courses that combine to form the comprehensive studio in the graduate program. In these two courses, precedents are introduced as a means of learning about building materials, components, and assembly process. In the precedent, students document and analyze the tectonic components and assemblies of a building that is similar in size and function to the type of building they will design. The understanding of construction details, structural behaviors, and material properties gleaned from the precedent are then applied and expanded upon in the design of their project.

A.9 Historical Traditions & Global Culture (M. Arch)

2015 *Visiting Team Assessment*: This criterion is primarily addressed in Arch 267 – World Architecture 1 and in Arch 330 – Theory of Architecture in the B. Arch program, and in Arch 554 – Criticism 1: Fieldwork Los Angeles in the M. Arch program.

Based on course syllabi, assignments, and readings, this condition is **Met** in the B. Arch program. The team notes concern about covering the entire history of world architecture before the 19th century in one course. The condensation of this vast subject into a single course significantly compromises students' understanding of the subject matter.

Based on course syllabi, assignments, and readings, this condition is **Not Met** in the M. Arch program. The Arch 554 – Criticism 1 and Arch 555 – Criticism 2 courses look at various topically organized examples across both time and space, but, in most cases, irrespective of the specific socio-cultural context of the examples and the specific historical traditions to which the examples belong. Since the content of the courses is not chronologically and contextually organized, students' work overall does not demonstrate an understanding of historical traditions and global culture, including an understanding of parallel and divergent canons and traditions of architecture, landscape, and urban design.

Woodbury University, 2017 Response: The criticism sequence in the graduate program is being reconsidered, both in terms of scope and assignments.

Woodbury University, 2017 Response (Revised):

GRADUATE PROGRAM

There are four courses in the criticism track in the graduate program. Criticism 1, 2, and 3 provide a historical and contemporary understanding of architectural traditions, while Criticism 4 prepares students for their thesis project. Criticism 1 focuses on historical traditions and contemporary trends specific to Los Angeles. Criticism 2 and 3 are global in scope. At the time of the last NAAB visit, Criticism 2 covered a period from prehistory to 1945 while Criticism 3 covered 1945 to the present. The catalog descriptions for these courses are below:

We are in the process of more evenly distributing this timeline across these two courses. To make sure all MArch students are exposed to the entire chronology, we now require that 2-year MArch students take Criticism 2, ensuring that both 3-year and 2-year students take all of the first three Criticism courses.

Moreover, in the first three courses (Criticism 1-3), the syllabi are being updated to ensure that content is presented historically as well as contextually with relationship to other cultural, social, and political dynamics. Students are required to incorporate this broadened scope of understanding into their assignments for all three courses.

Woodbury University, 2020 Response:

GRADUATE PROGRAM

The MArch program teaches an understanding of historical traditions and global culture, including an understanding of parallel and divergent canons and traditions of architecture, landscape, and urban design in the criticism courses. In fall 2020, the graduate program launched its revised Criticism sequence that specifically address the concerns documented in the 2015 Visiting Team Assessment.

There are four criticism courses in the MArch program. ARCH 554: Criticism 1: Architecture History 1 spans a chronological period from pre-history to the nineteenth century in Western and non-Western societies. ARCH 555: Criticism 2: Architecture History 2 spans a chronological period from the nineteenth century to present time. ARCH 556: Criticism 3: Architecture Theory spans a chronology of ideologies as they relate to inhabitation from 1945 to the present time. ARCH 648: Criticism 4: Research Salon and Thesis Preparation synthesizes historical and theoretical content into contemporary Positions. In 2015 the four-course criticism sequence contained one history course that was global in scope and one history course that was local in scope. The revised sequence eliminated the course that was specific to the local scope of history and expanded the global scope to two courses. The additional 3 units of global architectural history affords a more expansive understanding of the divergent canons and traditions.

The new criticism sequence not only revises the material covered in each course; it also revises the material generated in each course. In Architectural History 1 and 2 students are asked to keep a sketchbook where they document and analyze the work discussed in weekly lectures. The sketches should explore the form, function, and environmental performance of historical artifacts. In Architecture Theory students do a semester long research paper on one specific building. This deep-dive assignment allows student to understand the wide range of influences and effects contained within a single architectural project. In the Research Salon, students identify a range of historic and contemporary artifacts and ideologies and then synthesizes them into an intellectual position that serves as the foundation of their Graduate Thesis. The artifacts and positions coalesce into a book for each student.

B.1 Pre-Design (B. Arch & M. Arch)

2015 Visiting Team Assessment: The primary delivery course for the B. Arch program is Arch 448 – Professional Practice 2, and, in the M. Arch program, it is Arch 649 – Criticism 4. In both accounts of evidence reviewed, there is an understanding of the relevant laws and standards as well as defining a site selection, developing design assessment criteria for the project, and including a site analysis. However, the evidence does not show the clear ability across student work to prepare a comprehensive program,

assess client and user needs, and inventory space and equipment requirements, all considered essential to clarity in the design process.

Woodbury University, 2017 Response: Both ARCH 448 and ARCH 649 will include program preparation.

Woodbury University, 2017 Response (Revised):

UNDERGRADUATE PROGRAM

This SPC is introduced in ARCH 383 Studio 3A and demonstrated in ARCH 448 Professional Practice 2.

ARCH 383 Studio 3A (Housing) introduces students to pre-design through the assessment of differential client and user needs. This studio specifically investigates large-scale multi-family housing in an urban context. Students learn to understand architecture as an outcome of requirements. Required studio assignments include developing the tools for identifying and communicating spatial requirements, analyzing site conditions (including existing buildings in the urban context), and reviewing relevant building codes and standards (including exiting diagrams and accessibility standards at multiple scales).

Pre-Design is now mastered in ARCH 448 Professional Practice 2, which is the preparatory course in the semester before the execution of the final capstone studio, ARCH 492 Degree Project Studio. As part of this Professional Practice course, students are now required to demonstrate ability to prepare a comprehensive program for an architectural project as outlined in the student performance criteria. Students prepare drawings that communicate assessment of client and user needs, review relevant building codes and standards and how they may impact the final building design, and assess relevant sustainability requirements and how these may be integrated into the final design. All the information that is collected and analyzed informs the final project design and addresses site specifics design criteria.

GRADUATE PROGRAM

Environmental performance analysis as a program requirement and determinant of design criteria, is introduced in ARCH 547 Building 4. Students are required to analyze environmental performance through an iterative process that is intended to demonstrate how design decisions directly affect the environmental performance of a building. Through these drawings, students assess the implications of site selection and environmental factors on building design.

We are in the process of revising ARCH 648 Criticism 4 Research Salon and Thesis Preparation to more closely match the scope of the undergraduate Professional Practice 2 course, ARCH 448, described above. Students in both courses will be expected to demonstrate skills in identifying user needs and their impact on design performance criteria.

Woodbury University, 2020 Response:

UNDERGRADUATE PROGRAM

From 2017 to 2020, the BArch program continued to address program development, the assessment of client and user needs, and the inventory of space and equipment in ARCH 383: Design Studio 3A. In addition, this is addressed in ARCH 487: Design Studio 4A. ARCH 487 is the comprehensive design studio in the undergraduate program. The first assignment is a precedent analysis that is specific to the typology of the design problem. The precedent is analyzed theoretically and programmatically. Students are then expected to translate the precedent analysis into a set of criteria for their design project.

As part of the evidence, the first assignment in ARCH 383 students are asked to work with spatial disrupters that are designated to be examples of specific client needs. Students are expected to design specific responses to each of the following items: (a) a live animal, (b) a set of keys, (c)100 lineal feet of books, (d) a family heirloom chair or modernist chair, (e) living plant, (f) a window herb garden, (g) a place for reading with natural light, (h) 300 square feet of storage, (i) laundry basket, (j) linen closet, (k) a framed view to the outside, (l) *Object d'art*, (m) a chandelier, (n) a bicycle, (o) outdoor eating area, (w) wallpaper. Students are asked to examine the requirement from a spatial and functional perspective and create a story that explains the use experience in a real world, physical setting. The plan and section drawings illustrate an attention to detail that results in a precisely calibrated interior organization where there is a place for everything, and everything has its place.

Pre-design parameters are further developed in ARCH 448: Professional Practice 2. ARCH 448 is the research semester that precedes the final studio project for undergraduate students. It serves as the first semester of a two-semester capstone project. As part of the evidence, ARCH 448 Assignment 1 requires students to develop a program in relationship to a theoretical position. In this sense, the program is meant to exemplify the spatial conditions that underpin an intellectual position. As an extension of the approach to program, students are also required to select a site that problematizes an investigation. The work sample illustrates the use of program and site to facilitate a theoretical position by reading and extending historical tradition into contemporary design work. Employing the foundational knowledge, students in the undergraduate program are obtaining a critical understanding of predesign criteria as a precursor to the emergence of a conceptual design project.

In Fall of 2020, a revised BArch curriculum was implemented that expands the Professional Practice sequence so that it includes a course, ARCH 362: Professional Practice 2 that addresses the concepts and issues related to predesign and project preparation. In this course, students will analyze regulatory context, social issues, and environmental issues that then define the pre-design parameters. The revised BArch curriculum will also integrate these issues iteratively into the studio sequence. ARCH 101: Studio One will document codes and regulations that govern accessibility and use this documentation to establish design parameters. ARCH 201: Studio Three will document codes and regulations that govern zoning and use this documentation to establish design parameters. ARCH 301: Studio Five will document codes and regulations that address life-safety and uses this documentation to establish design parameters. ARCH 401: Studio Seven synthesizes all the above. These courses have yet to be taught in their entirety so there is no student work that can be submitted as evidence.

GRADUATE PROGRAM

From 2017 to 2020, the MArch program continued to address program development, the assessment of client and user needs, and the inventory of space and equipment in ARCH 547: Building Four and ARCH 589: Graduate Studio 4. These are co-requisite courses that form the comprehensive design semester in the graduate program. Students analyze a precedent project for an understanding of material and environmental parameters that inform design decisions. The analysis informs their design decisions.

In Fall of 2020, the learning outcomes assigned to MArch courses were revised. As a result, an expanded pre-design parameter has been introduced within the studio sequence. Moving forward, ARCH 583: Grad Studio One will document the codes and regulations that govern accessibility and use this documentation to establish design parameters. ARCH 587: Grad Studio Three will document the codes and regulations that govern zoning and use this documentation to establish design parameters. ARCH 587: Grad Studio Three will document the codes and regulations that govern zoning and use this documentation to establish design parameters. ARCH 589: Grad Studio Four will document codes and regulations, zoning, and life-safety and use this documentation to establish design parameters.

In addition to Design Studios, the MArch program addresses these same issues in ARCH 620: Professional Practice. ARCH 620 addresses the phases of project development including the budgetary impact of each phase. It also addresses regulatory context, social issues, and environmental issues that inform pre-design criteria.

B.2 Accessibility (B. Arch & M. Arch)

2015 Visiting Team Assessment: Primary evidence used by the 2015 team was Arch 464 – System Integration (instructors: Deutsch, Roberts, Sturla, Tate, Taalman, and Tracey). There is evidence of ramps, elevators, wheelchair radius in toilet rooms and stalls, and adequate door widths shown in studio projects in B. Arch. 464 (Systems Integration). The final exams provided in B. Arch 250 (Professional Practice 1) include questions about accessibility (physical and sensory). The ability to demonstrate projects involving sensory and cognitive disabilities was not shown. In Arch 547, there is evidence of the ability to address physical accessibility; however, cognitive, and sensory disability design was not demonstrated. The curriculum provided a level of understanding but did not rise to the level of ability.

Woodbury University, 2017 Response: We are still struggling with how to demonstrate the ability to design projects involving sensory and cognitive disabilities. This is a work in progress.

Woodbury University, 2017 Response (Revised):

UNDERGRADUATE PROGRAM

ADA-specific building codes and regulations, and drawing and specification standards, are introduced as independent assignments in the 2nd year ARCH 250 Professional Practice 1 course and in the 3rd year ARCH 425 Environmental Systems course and are demonstrated in ARCH 384 Studio 3B (Form and Structure) and ARCH 487 Studio 4A (Integrative Design Studio).

Students first learn the importance of accessibility throughout the foundation studio sequence as an integral design element so that by the 3rd year, students understand accessibility as an implicit part of every design problem. This includes developing appropriate paths of travel and sequences of movement from the street level (including automotive, public transportation, pedestrian circulation) throughout the building and at multiple scales, including parking areas. Accessibility in exterior conditions is emphasized in Studio 3B.

In Studio 4A, students are required to design a public building, with multiple levels and multiple program elements. Students demonstrate an ability to design a complex building that allows for independent and integrated use by individuals with physical, sensory, and cognitive disabilities. Students are required to produce an accessibility drawing that incorporates appropriate standards as required by building codes and regulations.

GRADUATE PROGRAM

Accessibility is introduced in ARCH 584 Studio 2 (Living Organizations) as part of an understanding of human scale, organizing logics of design, and systems of material assembly. Later, in ARCH 587 Graduate Studio 3 (Infrastructure), learning outcomes include an understanding of accessibility principles and standards regarding site, including spatial relationships and circulation. Requirements for accessibility are discussed in lecture courses and in introductory studios including horizontal and vertical circulation, ramps and parking requirements, toilet room clearances and design requirements for sensory impairments.

In ARCH 587 Studio 4 (The Total Building), students are challenged to synthesize architectural considerations in the comprehensive design of a building. Objectives and learning outcomes for this studio include demonstration of access and egress design criteria as laid out in the most recent issue of the ADA Standards for Accessible Design. This studio is co-taught with ARCH 547 Building 4 (Environmental Systems Integration).

Woodbury University, 2020 Response:

UNDERGRADUATE PROGRAM

From 2017 to 2020, the BArch program continued to address accessibility throughout the studio sequence and in professional practice. As a part of the evidence, the ARCH 250 work sample demonstrates an understanding of accessibility standards in terms of interior organization and layout. Physical disabilities are accommodated through turning radii, opening sizes, and circulation standards.

It should be noted that we have struggled to implement cognitive and sensory disability design. Please note that in 2020 we remapped all of our courses according to the PC's and SC's published by NAAB in 2020. That mapping specifically addresses cognitive and sensory disability in ARCH 301 where one learning outcome reads: Identify a range of community stakeholders with diverse physical and mental abilities and to translate that understanding into the built environment.

Current courses and learning outcomes based on SC.3 Regulatory Context:

ARCH 101 Studio 1: Cite and diagram codes, regulations, and evaluative process that address accessibility in buildings and on sites.

ARCH 301 Studio 3: Cite and diagram codes, regulations, and evaluative processes that address life safety in buildings and on sites.

ARCH 401 Studio 4: Cite and diagram life-safety standards, accessibility standards, and other codes and regulations relevant to an architectural project.

Current courses and learning outcomes based on SC.1 Health, Safety, and Welfare in the Built Environment:

ARCH 122, Building 1: Recognize basic principles of health, safety and welfare utilized in the appropriate selection of construction materials, products, components, and assemblies.

ARCH 262, Professional Practice 1: Interpret health, safety, and welfare concerns, including fire, egress, energy use, accessibility, and wellness.

ARCH 321, Building 2: Explain fundamental process of structural system analysis in relation to Heath, Safety and Welfare.

ARCH 421, Building 4: Examine basic principles involved in the appropriate application of building envelope systems and associated assemblies relative to building integration and human health safety and welfare.

ARCH 462, Professional Practice 3: Compare academic issues or concepts with health safety and welfare.

Current courses and learning outcomes based on PC.8 Social Equity and Inclusion:

ARCH 241, Criticism 1: World Architecture & Urbanism I: Illustrate research of the ethical issues involved in the formation of professional judgment regarding social, political, and cultural issues in architectural design and practice.

ARCH 242, Criticism 2: World Architecture & Urbanism II: Examine ethical issues involved in the formation of professional judgment regarding social, political, and cultural issues in architectural design and practice.

ARCH 301, Studio Five: Identify a range of community stakeholders with diverse physical and mental abilities and to translate that understanding into the built environment.

ARCH 341, Criticism 3: Architectural Theory: Debate the discipline's responsibility to work in the public interest, to respect historic resources, and to improve the quality of life for local and global neighbors.

GRADUATE PROGRAM

From 2017 to 2020, the MArch program continued to address accessibility in ARCH 587 Studio 4 which challenges student to synthesize architectural considerations in the comprehensive design of a building.

In ARCH 587 Studio 4 (The Total Building), students are challenged to synthesize architectural considerations in the comprehensive design of a building. Objectives and learning outcomes for this studio include demonstration of access and egress design criteria as laid out in the most recent issue of the ADA Standards for Accessible Design. This studio is co-taught with ARCH 547 Building 4 (Environmental Systems Integration), which has now been modified to include assignments where students produce detailed drawings that incorporate design elements not only for physical impairment but also for sensory impairments (i.e., sensory impaired signage, inclusion of hearing-impaired devices, textured flooring materials, etc.).

It should be noted that we have struggled to implement cognitive and sensory disability design. Please note that in 2020 we remapped all of our courses according to the PC's and SC's published by NAAB in 2020. That mapping specifically addresses cognitive and sensory disability in ARCH 589 where one learning outcome reads: Interpret health, safety, and welfare concerns, including fire, egress, energy use, accessibility, and wellness. Accessibility is also mapped to ARCH 584 where on learning outcome reads: Identify a range of community stakeholders with diverse physical and mental abilities and translate that understanding into the built environment.

B.3 Sustainability (M. Arch)

2015 Visiting Team Assessment: This criterion is primarily addressed in Arch 464 – Systems Integration and Arch 487 – Studio 4A at the undergraduate level, and in Arch 547 – Building 4 at the graduate level. Concern exists because this criterion is not more central to design education and is primarily presented in a perfunctory manner and not driving real design innovation and critical dialogue. While "EcoTech" is used in the curriculum, "Net Zero" (Zero Net Energy – ZNE) mandates in professional practice are considered an appropriate approach in meeting this criterion.

Woodbury University, 2017 Response: The comprehensive studios this semester will compete in the ACSA COTE competition. This is intended to make the issue of sustainability more central to the work.

Woodbury University, 2017 Response (Revised):

GRADUATE PROGRAM

Given that 'Environmental Stewardship' is one of the five new Defining Perspectives of the 2014 Conditions, we are taking steps to ensure that Sustainability, as well as an understanding of methods for stewardship of the environment and natural resources, become more central to our co-curricular opportunities and integrated into our program curricula. We are considering the learning outcomes specific to the criterion of Sustainability as a multi-pronged approach to be integrated throughout the graduate curriculum. Given that the undergraduate sequence of courses has met this criterion, the graduate courses will be remodeled to follow the learning outcome sequence of the undergraduate curriculum and taught by experienced professionals with expertise in sustainable design more closely.

In the studio sequence, ARCH 584 Studio 2 (Housing) involves extensive precedent study, including analysis of projects that optimize, conserve, and reuse natural and built resources, and provide healthful environments for occupants and users.

The co-requisite graduate courses, ARCH 547 Building 4 (Environmental Systems Integration) and ARCH 589 Studio 4 (The Total Building), include several assignments in which students, using Revit Ecotec and other energy modeling software, demonstrate an ability to analyze environmental impacts of design decisions in an iterative series of assignments. Lectures in the Building 4 class introduce strategies for carbon-neutral design, bioclimatic design, and energy efficiency. Students then apply these strategies in their studio projects that are required to demonstrate a 'net zero energy' approach.

We believe that as an evolving area of the discipline, environmental stewardship in syllabi should reflect the most current design innovations and critical dialogue rather than absolutes. In this regard, we would like to note our concern with the visiting team's assessment. This particular SPC does not call for "design innovation" nor does it require that a particular and/or local mandate (Zero Net Energy) be a more-or-less appropriate response. To express concern that this particular SPC is not more central to design education shows a bias not described by the NAAB. The team claims that the work shown for this SPC, while perfunctory, exists. We believe it is wrong to say that the SPC is not met.

Woodbury University, 2020 Response:

GRADUATE PROGRAM

From 2017 to 2020 ARCH 547: Building 4 and ARCH 589: Graduate Studio 4 continue to address issues of sustainability. These co-requisite courses result in a comprehensive building design that integrates passive and active sustainable features. One of the assignments in ARCH 547: Building 4 requires students to analyze their design project from ARCH 589: Graduate Studio 4 in terms of passive environmental systems. Specifically, students are asked to consider the use of bioclimatic design and building elements in the design of a sun shading system that modulates heat gain and natural ventilation.

B.4 Site Design (M. Arch)

2015 Visiting Team Assessment: This criterion is **Met** in the B. Arch program through Arch 487 and 464 – Studio 4A and Systems Integration. The curriculum could still use more rigor in the comprehensive focus and impact on the architectural design, enhanced critical and conceptual underpinnings, and the utilization of landscape faculty and practitioners more effectively to create truly integrated designs. The overall approach in the Comprehensive Design studio feels perfunctory and checklist-based rather than integrated into the process and approach to solving the design problem.

This criterion is **Not Met** in the M. Arch program, with evidence addressed in Arch 547 – Building 4, but not described at the ability level. Evidence of the ability to incorporate coursework that individually encompasses site issues is largely missing from almost all projects examples provided. The focus in sample work is largely on the building (object) and the specific issues of that building rather than on how it really connects to the site, immediate environment, topography, surface water flow and retention, planting strategies, and landscape concepts.

Woodbury University, 2017 Response: Moving forward, this criterion will be met by other studios.

Woodbury University, 2017 Response (Revised):

GRADUATE PROGRAM

We are more closely modeling our approach to Site Design in the graduate program on that of the undergraduate program, where the SPC was met. Site Design in the graduate program is now developed in two back-to-back studios in the second year of the curriculum, along with an associated building systems seminar. This ensures greater rigor of integration of site design into solving the design problem.

The project brief given to students in ARCH 587 Graduate Studio 3 (Infrastructure) has been modified to allow this criterion to be fully met in the second year of the 3-year graduate program. The project parameters now require students to design a project in an urban context with a significant (30,000 sf or greater) landscape component. This allows students to more intentionally integrate site parameters into the design of the project, including site context and developmental patterning, historical development of the environs, soil and topography, surface water flow and retention, ecological factors such as watershed and climate, site and building orientation, particularly as the landscape and exterior features of the project design are developed.

ARCH 589 Studio 4 (Integrative Design Studio), co-taught with ARCH 547 Building 4 (Environmental Systems Integration), has been revised and now addresses site as one of several parameters for sustainable design. The project brief will now include appropriate context demanding that students evaluate urban and developmental patterns as well as historical fabric. In Building 4, students are required to produce site drawings for their studio project that includes information about soil, topography, water runoff and watershed as site factors that must be considered in design iterations. As part of the response to the B.3 Sustainability criterion (see response to B.3 above), students are also required to demonstrate in their site drawings for their final project how ecology, climate and building orientation have affected decisions in the development of the final project design.

Woodbury University, 2020 Response:

GRADUATE PROGRAM

From 2017 to 2020 the MArch program continued to integrate site design into coursework for ARCH 587: Graduate Studio 3 and for the co-requisite courses ARCH 589: Graduate Studio 4 and ARCH 547: Building 4.

ARCH 587: Graduate Studio 3 analyzes the urban context including the scale, patterning, and demographics of the built environment that surrounds the site. This analysis informs design decision. ARCH 589: Graduate Studio 4 and ARCH 547: Building 4 address site in spatial, material, formal, and environmental terms. In the evidence attached to the report, students in ARCH 589 worked on a multi-unit micro housing development in the arid landscape of Palm Springs, California. Students were required to develop the natural features of the site at multiple scales. In terms of the unit, students were required to develop outdoor space adjacent to units that facilitated airflow and the effects of natural light. In terms of the overall development, students were required to produce natural features that serve as collective landscapes. These landscapes are considered in terms of passive environmental systems.

B.7 Financial Considerations (B. Arch)

2015 *Visiting Team Assessment*: This criterion is **Met** in the M. Arch program through evidence presented in Arch 620 – Professional Practice 1.

This criterion is **Not Met** in the B. Arch program through evidence examined primarily in Arch 450 – Professional Practice 3, which was particular to life-cycle cost accounting. Arch 250 presents an introduction to this criterion but does not evidence an understanding that is demonstrated in student products.

Woodbury University, 2017 Response: We continue to work on this issue.

Woodbury University, 2017 Response (Revised):

UNDERGRADUATE PROGRAM

As noted by the Visiting Team, this SPC is introduced in ARCH 250 Professional Practice 1, where students are asked to produce rudimentary building cost spreadsheets and assignments that demonstrate understanding of building operational costs.

This SPC continues to be addressed in the undergraduate course ARCH 450 Professional Practice 3, but the course has been modified to incorporate exercises required in the graduate coursework which successfully met this SPC. Students form teams in which they develop a speculative 'professional office' and identify a building typology for which this office will specialize. For their final project, they are required to produce a report for an imaginary client and project that aligns with their office structure. The report includes pro-formas. As part of their final assignment, students are required to prepare a report that includes acquisition costs, speculate on types of project financing and funding, financial feasibility studies, operational costs for the specific building, and construction estimating which emphasizes life-cycle cost accounting.

Woodbury University, 2020 Response:

UNDERGRADUATE PROGRAM

From 2017 to 2020 the BArch program continued to integrate financial considerations into coursework for ARCH 450: Professional Practice 3.

ARCH 450: Professional Practice 3 studies firm management including contracts and fees, project budgets, and cost estimates. In the evidence attached to the report, students in ARCH 450 are asked to create a financial plat for a startup office that includes the following financial information: 1. Start-up capital, 2 projected operating statement, 3. Revenue plan, 4. Staffing plan, 5. Overhead expense budget, 6. Profit plan, 7. Hourly billable rates, and 8. Forms of capital. This exercise introduces students to considerations and complexities of running an office. It also provides students with the tools necessary for consideration of running their own office.

In 2020 a revised BArch curriculum was implemented. The revised curriculum expands the professional practice sequence from two to three courses. In this revised sequence, ARCH 362: Professional Practice 2 will look at project development including the financial process. ARCH 462: Professional Practice 3 looks at firm management, services, professional contracts and fees, project budgets and cost estimating. In fall of 2020 the learning outcomes in the BArch program have been re-written in response to the new NAAB criteria. Below are the courses with the redistributed learning outcomes specific to the financial considerations criteria.

C.1 Collaboration (M. Arch)

2015 Visiting Team Assessment: The evidence found in the primary course delivery for B. Arch showed the ability to work in collaboration with others and in multidisciplinary teams. There was additional evidence of collaborative student work that met the criterion in Arch 384 Studio 3B. Students are working together to develop a unified competition project submission. Evidence of multidisciplinary collaboration with external consultants was found in Arch 487 Studio 4A; consultants are scheduled to come into studios throughout the semester and actively engage the students in their design projects.

The primary course delivery for M. Arch is Arch 589 Studio 4. The students worked collaboratively with key multidisciplinary consultants throughout the semester to develop comprehensive design solutions. However, the evidence does not show the ability to work in collaboration with other students. There are several cases where teams are working to do the initial part of a project, such as research, site analysis, and mapping, but each individual student creates the design solutions.

Woodbury University, 2017 Response: We continue to work on this issue in this studio and in others.

Woodbury University, 2017 Response (Revised):

GRADUATE PROGRAM

'Collaboration and Leadership' is now one of the five new Defining Perspectives of the 2014 Conditions. The graduate curriculum has been adjusted to provide opportunities for collaborative student work in multiple courses to align with the undergraduate program coursework which successfully met this criterion.

While in ARCH 544 Building 1 students already work together in teams on a design project, ARCH 589 Graduate Studio 4 (The Total Building) and ARCH 620 Practice 1 (Contemporary Architectural Profession) will explicitly teach and use best-practice collaboration from outside architecture in which pairs or small groups of designers tackle a frequent problem.

In ARCH 589 Studio 4 (The Total Building), students continue to work collaboratively with key multidisciplinary consultants, including structural, MEP engineers, landscape architects and urban planners, throughout the semester in developing their comprehensive design solutions. In ARCH 620 Practice 1 (Contemporary Architecture Profession), students work in teams of three or more to develop speculative professional offices and to address planning and risk management.

Woodbury University, 2020 Response:

GRADUATE PROGRAM

From 2017 to 2020, the MArch program continued to address teamwork in ARCH 620: Professional Practice 1. In addition, students have worked in teams in ARCH 5759: Graduate Fieldworks Studio.

ARCH 620: Professional Practice 1 provides an overview of the allied professional that architects collaborate with on the development and execution of a project. In the syllabus for ARCH 620, Fall of 2020, it states that one of the learning outcomes is to examine interdisciplinary collaboration to meet project goals and to review the conventions of architecture office and project management. Assignment 5 specifically asks students to form into 3 person teams. One person will be the Owner, one the Designer, and one will be the Builder. Each person will have specific tasks to complete the project, however all team members are graded in part on the performance of the team as well as their individual performance. The student work shows the contract, the design and assessment based on a series of questions.

C.5 Practice Management (B. Arch)

2015 Visiting Team Assessment: The B. Arch course Arch 450 – Professional Practice 3 does not completely fulfill the criterion details. The specific information missing includes documentation showing coursework that incorporates risk management, mediation, and arbitration. In addition, the curriculum is cursory and does not provide enough information for the student to fully understand financial management and business planning.

The M. Arch course Arch 620 – Professional Practice 1 meets the criterion requirements. There is a level of concern regarding the minimal amount of effort spent on planning in the course. Additional coursework on risk management (including arbitration and mediation) and long-range planning is also encouraged.

Woodbury University, 2017 Response: We continue to work on this issue.

Woodbury University, 2017 Response (Revised):

UNDERGRADUATE PROGRAM

This SPC is addressed in the required course, ARCH 450 Professional Practice 3. This course has been slightly modified to more closely follow the model of the graduate ARCH 620 Practice 1 (Contemporary Architecture Profession), which successfully met this SPC.

ARCH 450 is the capstone course in the three-course professional practice sequence. The first professional practice course introduces students to conventions of architectural production, how to generate drawing sets that translate and communicate client needs to contractors and other stakeholders. In the second professional practice course, students are asked to further develop client needs and

context specifics as they relate to codes and regulations that govern the development of an architectural project and translate that knowledge into a diagrams and drawings that demonstrate an understanding of spatial conditions of regulating bodies and forces. ARCH 450 emphasizes the business of design and as such addresses managing and operating a practice, legal responsibilities and risk management, financial management and business planning, legal tools for conflict resolution including mediation and arbitration, and professional conduct as prescribed by the professional regulatory bodies of NCARB and AIA.

Woodbury University, 2020 Response:

UNDERGRADUATE PROGRAM

From 2017 to 2020, ARCH 450 Professional Practice 3 has continued to address Practice Management.

ARCH 450 emphasizes the business of design and as such addresses managing and operating a practice, legal responsibilities and risk management, financial management and business planning, legal tools for conflict resolution including mediation and arbitration, and professional conduct as prescribed by the professional regulatory bodies of NCARB and AIA.

In 2020 a revised BArch curriculum was implemented. The revised curriculum expands the professional practice sequence from two to three courses. In this revised sequence, ARCH 362: Professional Practice 2 investigates the financial process of a project and ARCH 462: Professional Practice 3 looks at financial processes of an office including firm management, services, professional contracts and fees, project budgets and cost estimating.

II. Progress in Addressing Causes of Concern

Knowledge Range (B. Arch & M. Arch)

2015 Visiting Team Assessment: The scale of the university and its ability to offer additional electives and deeper knowledge limits students' ability to bring greater depth to their design work as students and, ultimately, as architects. This is found in the limits to the parallel electives offered, the limits to the library collection, and, ultimately, concerns about diversity and depth of study presented through the history, cultural studies, sociology/anthropology, and humanities coursework available to architecture students. While the digital fabrication labs (both sites) are an amazing resource that will position the school well with regard to the future ability of the students to gain employment in architecture, there is some concern that faculty generally lack the experience and knowledge to lead the students toward more innovative and perceptive work.

Woodbury University, 2017 Response: We are working collaboratively across schools to offer a wider range of electives.

Woodbury University, 2017 Response (Revised):

We have reservations about this Cause of Concern.

It is unclear whether the comment about the lack of experience and knowledge of our faculty refers to School of Architecture faculty, or faculty at the University who are offering electives in which our graduate students may enroll. The School of Architecture faculty qualifications include four doctorates (in a pool of 16 fulltime faculty), strength in terminally degreed faculty in fulltime and adjunct pools, over 50% of the fulltime faculty achieving licensure, a multitude of design awards and a rigorous record of annual scholarly and professional accomplishments and publications. Our fulltime faculty in the University are equally accomplished.

We would also like to note that no NAAB condition or criterion addresses the size of an institution offering a NAAB-accredited degree, nor the number and range of parallel electives offered. The range of electives offered to graduate and undergraduate Woodbury architecture students from the College of Liberal Arts, the School of Media, Culture and Design, the School of Business, and the School of Architecture is greater in number, more diverse, and deeper than it has been since any previous NAAB visit dating back to our initial accreditation visit in 1995. We find that this cause of concern is inappropriate and contradicts previous VTRs.

The 2015 VTR identifies **Condition 1.2.5 Information Resources** as **Met**, which is contradicted by the statement in the above Cause of Concern that refers to the "limits of the library."

Other changes have been made in offering graduate students a greater choice of electives, especially in technical areas. These include electives that are cross-listed with our Applied Computer Science program, along with a University-wide rethinking of the GE courses to better serve all of our students and bring depth to their work and to their research-based capstone projects.

Progress continues in the development of our post-professional one-year MS Arch program as a research resource serving graduate and undergraduate students outside the one-year program. Dr. Ewan Branda, who has been appointed Director of our post-professional programs, will be developing a structure that allows our faculty to cultivate their research into coursework available to our graduate students as elective lecture courses, upper-division research studios, and Research Assistantships. One example is the contract being developed between full-time faculty member Dr. Anthony Fontenot with the Aga Khan Trust for Culture (AKTC), in which students will engage next year in a research project in Kabul, Afghanistan.

We are taking steps to exploit our offerings in programs outside of the School of Architecture into coursework available to our students. These include cross-listed courses with our Film, Game and Applied Computer Science programs; and opportunities for a dual major with our School of Business (where students can get both MArch + MBA degrees in three and four years).

Woodbury University, 2020 Response:

Please refer to our 2017 Response which outlines our reservations about this Cause of Concern.

We continue to work collaboratively with other schools, including the College of Liberal Arts which delivers many of the General Education courses, the Schools of Business, and the School of Media, Culture and Design, to broaden the range of electives our students can take. A significant number of our students continue to enroll in minors offered by the other programs at the University.

Additionally, the School of Architecture is on track to add three new multidisciplinary programs, including Applied Computer Science-Media Arts, Sustainable Practice (starting in 2021) and Construction Management (starting in 2022). These programs will bring additional courses, skillsets, resources (such as a new robotics lab), and full-time staff and faculty with a range of skills and professional backgrounds that are new to our School. Students in the BArch and MArch programs will directly benefit from the new knowledge range delivered by these new programs in the form of new electives, new faculty, and new resources.

M. Arch Degree Program (B. Arch & M. Arch)

2015 Visiting Team Assessment: There is now cause for a comprehensive review of the graduate program curriculum and degree structure. To a large extent, the unmet student performance criteria listed represent the relative "newness" of the program and the nascent integration of subject matter and student outcomes. The team found, for example, that the consolidation of architectural history subjects with "critical theory" made the transition to an introduction (terminology, case studies, scholarship) to reflection, critical thinking, and the design process very difficult. Depth is sought in the specific, standard design methods that have a direct corollary to practice protocols and practice precedents. Finally, the lack of opportunity to take elective course offerings in the history/theory area of the curriculum should be addressed.

Woodbury University, 2017 Response: Ewan Branda has been appointed as the chair of the graduate program and, in this capacity, plans to reconsider the graduate curriculum. We hope to have a full rewrite before the next visit.

Woodbury University, 2017 Response (Revised):

Note: This Cause of Concern has been mislabeled BArch and should only refer to the MArch program.

Again, we have reservations about this cause of concern. Across the range of NAAB-accredited architectural programs, there exists a wide variety of approaches to both architectural history and practice. That our approach includes critical theory should not, according to NAAB mission and values, be a cause for concern. To say so in the VTR shows bias against a philosophical and pedagogical position, but not proof that the demonstration of student work is, or is not, meeting student performance criteria.

It is not clear from NAAB criteria that "standard design methods" exist nor that such methods have a direct corollary to practice, and we feel that the VTR demonstrates a bias that critiques the way our program approaches pedagogy rather than the demonstration of student performance.

Electives are offered across a range of topics and students can take electives of their choice. The 2015 Team Assessment of section II.2.2 (Professional Degrees and Curriculum) describes the opportunity to take electives, and this criterion was considered *Met*, a decision that contradicts this Cause for Concern.

In 2012, the NAAB visiting team found only three unmet SPC's in the initial accreditation visit compared to the seven in this VTR. Based on evidence, we feel that the program is healthier in 2015 than in 2012: we have a stronger applicant pool based on the growing reputation of the program, more qualified students of a higher caliber, a greater number of full-time faculty teaching in the program, and notable success of graduate students and alumni being hired for positions in top design offices as reported in the APR. We feel that there is no NAAB condition or criterion that justifies this cause of concern.

Chairs of the graduate program, Heather Flood and Catherine Herbst, working with Associate Dean Ewan Branda and SoA faculty, are scheduled to bring changes to the graduate curriculum to the University Curriculum Committee next year (AY 2018-19). Our continued commitment to architecture as a joint investigation of professionalism and critical inquiry is demonstrated in continuous improvements to the graduate curriculum.

Woodbury University, 2020 Response:

Please refer to our 2017 Response which outlines our reservations about this Cause of Concern.

Changes to the MArch Criticism course sequence and content were implemented this year (Fall 2020). As outlined in our proposal to the Curriculum Committee, "the proposed changes are to help implement NAAB SPC's into the MArch 2-year track and to align our MArch 2-year and 3-year track with a more comprehensive overview of the history of architecture. That 2-year MArch students did not previously take the entire sequence of Criticism courses was also identified as a shortcoming in our MArch program by the last NAAB Visiting Team. This proposal allows us to address this unmet criterion."

There are four courses in the Criticism track in the graduate program: Criticism 1, 2, and 3 provide a historical and contemporary understanding of architectural traditions, while Criticism 4 prepares students for their thesis project. By revising the Criticism sequence of courses and adding Criticism 2 to the 2-year MArch program, we are ensuring that all MArch students (not just 3-year MArch students) are exposed to the entire chronology of architectural history, as well as an understanding of architectural theory. The syllabi are being updated in all Criticism courses to ensure that content is presented historically as well as contextually with relationship to other cultural, social, and political dynamics. Students are required to incorporate this broadened scope of understanding into their assignments for the first three Criticism courses and apply this historical and theoretical knowledge in Criticism 4 course to their own capstone project proposals.

Following are the new course descriptions for the MArch Criticism courses:

ARCH 554/Lecture - Criticism 1: Architecture History I

Survey of history and theory of architecture and design spanning a chronological period from prehistory to the nineteenth century in Western and non-Western societies. This course traces history with a process of focused explorations into diverse cultures, geographies, and places that examines many layers of historical time. When considered together, these explorations contribute to an understanding of architecture as a deeply bound discipline with components ranging from the artifacts of everyday life and ritual, to building traditions and practices, to the larger forces of geography and the design of entire cities ARCH 555/Lecture - Criticism 2: Architecture History II

Histories and theories of architecture, urbanism, and interiors are surveyed in Western and non-Western societies from 1900 to the present. The focus of this course is on the formal, aesthetic, cultural, and socio-political dimensions of modernism. Different historiographies are developed as various approaches in understanding modern architecture in its varied contexts, including but not limited to Marxist, Feminist, and Psychoanalytic.

ARCH 556/Lecture - Criticism 3: Architectural Theory (Modern to Contemporary)

Students delve into contemporary cultural, societal, and philosophical trends as filtered through architectural theory and manifest in the built environment. The interdependencies of ideology and inhabitation are revealed through global architectural and written case studies between 1945 and now. ARCH 648/Lecture - Criticism 4: Research Salon and Thesis Preparation

A research seminar treated as a design ideas salon introduces contemporary architectural questions and establishes the practical and theoretical context of the thesis project. Students incorporate the issues presented into a research platform and methodology and prepare thesis proposals.

Administrative Uncertainty (B. Arch & M. Arch)

2015 Visiting Team Assessment: Interim President David P. Dauwalder recently replaced the former university president, Dr. Luis Calingo, who stepped down on March 1, 2015. The strategic direction set by Dr. Calingo continues with support from the interim president and interim provost, Randy Stauffer (M. Arch., University of California, Berkeley), which provides a strong basis for comprehensive leadership moving forward. The risk is the direction the university could move toward with a permanent president and the ramifications which that may or may not have on the continued support for the School of Architecture. We report this as a "Cause of Concern" out of due diligence for the overall administrative structure and operations.

Woodbury University, 2017 Response: A new president has been in place since the previous visit and has brought a level of permanence.

Woodbury University, 2017 Response (Revised):

A new President, Dr. David Steele-Figueredo, and a Senior Vice President of Academic Affairs, Randall Stauffer, have been in place since the previous visit in 2015 and have brought a level of permanence to the administration. Their focus in the past two years has been on increasing enrollment and on overall fiscal responsibility for the University. It is important to note that we are the largest School in the University (over 36% of the students in this University are in the School of Architecture) with the highest national standings that bring prestige to the University. Both the President and VP of Academic Affairs have publicly affirmed their support for the mission and status of the School of Architecture within the University.

Woodbury University, 2020 Response:

University president Dr. David Steele-Figueredo and Senior Vice President of Academic Affairs Randall Stauffer remain in place since the previous visit in 2015. Their focus remains fiscal responsibility for the University. The Architecture department remains the largest in the University and its programs continue to be highly ranked nationally, which brings value and prestige to the institution.

Woodbury School of Architecture has two sites for its BArch and MArch programs that contribute to its unique identity: one in Burbank/Los Angeles and another in San Diego. The Burbank/Los Angeles and San Diego BArch and MArch programs are accredited together.

Our San Diego site is located in Barrio Logan, an up-and-coming industrial neighborhood and cultural district significant to the Chicano history in California, seventeen miles from Mexico. Located in an environment adjacent to a contested international border, and within an ecology that amplifies the negative effects of climate change, the San Diego site acts as an architecture laboratory for some of the most complex issues of our time. Unsurprisingly, our San Diego site has the highest ratio of Hispanic faculty, 38% (compared to 20% of our faculty in the School at large). Studio projects in San Diego are focused on communities of color, attracting faculty and students that are working locally on neighborhood development and community revitalization. The fluidity between the workspaces of the faculty, whose professional work directly influences the student work, and the studio learning spaces, has created a superb environment for studying architecture as well as providing real benefits to the neighborhood.

In November 2020, the President and University Board of Trustee Finance Committee made a motion to close our San Diego campus. The School of Architecture leadership is concerned about how this will impact overall enrollment in the architecture programs and our ability to achieve our mission.

The SVPAA continues to support the mission and status of the Architecture Programs. The Board of Trustees evaluates various aspects of the University with fiscal stability its primary focus. They look at the inclusion of the San Diego campus in the overall structure of the University solely from a fiscal perspective. The SVPAA has enlisted the power of shared Governance and Faculty input to present alternative views to the Board that reinforce the University Mission embedded in the programming on the San Diego campus.

Enrollment and Funding (B. Arch & M. Arch)

2015 Visiting Team Assessment: Given the reduction in the School of Architecture enrollment over the past 4 years and the direct connection between tuition and funding of the school, while financial resources have been adequate, there is a risk that funding could decrease and support for key facilities, faculty, and ultimately students could be negatively affected. In connection with Cause C (above), greater clarity and consistency of financial decision-making should be addressed in the future.

Woodbury University, 2017 Response: Our enrollment in the undergraduate program has increased over the previous three years due to a concerted recruiting effort. Enrollment in the graduate program and in San Diego remains a concern and is a high priority.

Woodbury University, 2017 Response (Revised):

A University-wide Strategic Enrollment Plan, led by Sr. VP of Academic Affairs Randall Stauffer, has been implemented to address the enrollment shortfalls. In Fall 2016 and 2017 and 2018, new student enrollment in the undergraduate architecture program increased. This was due to a concerted recruiting effort by the University Admissions team and the administrators of the School of Architecture. Enrollment in the graduate program in Los Angeles, and the programs in San Diego remains a concern and is a high priority. However, as of the time of the writing of this report, the enrollment numbers for the School of Architecture has increased compared to last year.

The University is taking steps towards providing greater transparency with financial decision-making. While the overall School of Architecture budget has decreased to align with decreasing enrollment, cuts have not been made to departmental funding for faculty travel and development, student activities, and key facilities, to ensure that the student experience is not negatively affected. To support student scholarships, the School of Architecture has launched its own development campaign that supplements our tuition-based model.

We are extremely optimistic about the future of our architecture programs at Woodbury University. Since our last NAAB visit, we have a new full-time faculty member, Architecture Chair Heather Flood; have improved our standing in national rankings by Design Intelligence for our BArch program (we are now ranked 18th in the nation); are leading the national conversation about diversifying the profession due to our exceptionally diverse student body; have established a consortium of over 40 professional firms in which our students are placed as part of our Integrated Path to Architectural Licensing (IPAL) program;

are adding a material testing lab as part of our Making Complex at our Los Angeles campus and paid for by our second federal PPOHA (Promoting Postbaccalaureate Opportunities for Hispanic Americans) grant; and have received significant donations for student scholarship support, including a \$161,000 gift from our local AIA chapter in the San Fernando Valley. We believe that these successes underscore the strength of our programs and the brightness of our future.

Woodbury University, 2020 Response:

Since 2015, the School of Architecture has seen sustained growth of new student enrollment numbers each year. Additionally, the total numbers of students in the School of Architecture has grown in the past two years. Notably, in Fall 2020, the School of Architecture was the only School at Woodbury University (the others are School of Media Culture and Design, School of Business, and College of Liberal Arts), that met its enrollment goals. 130 new students entered the programs, the majority of whom (85), entered the BArch program in Los Angeles.

In Fall 2019, Woodbury University was awarded a \$3 million Title V Grant to launch multiple computer science programs. As part of this initiative, the Applied Computer Science-Media Arts program moved from the School of Media Culture and Design to the School of Architecture. Next year, the School of Architecture is launching a new Design Computation program as part of this initiative. Mark Erison, one of the full-time faculty members from the Architecture program in Los Angeles, has been appointed chair of this combined ACS-MA/DC program. In Fall 2020, Woodbury University was awarded a second consecutive \$3 million Title V Grant. This grant will support the launch of two new programs in the School of Architecture: Sustainable Practices that draws interdisciplinary knowledge from the School of Business, and the College of Liberal Arts; and a Construction Management program with a focus on sustainable practices. The introduction of these three new programs will introduce expertise to the School of Architecture that directly addresses concerns that the 2015 Visiting Team identified as shortcomings in our programs, namely Sustainability, Technical Documentation, Site Design, and general concerns about 'Knowledge range', directly benefiting the BArch and MArch programs.

At the University level, the enrollment for Fall 2020 was 8% less than projected. Since the fall 2020 enrollment projections are used for budgeting, the university had to go through a post-fall budget adjustment process. While the loss of revenue affected the balancing of the budget, the university was able to reduce costs enough to fall within an acceptable loss. Since the previous year had seen a higher-than-expected enrollment, and we also received Federal funding under the CARES Act, we were well positioned, from a cash perspective, to move forward. Many of the students who did not enroll this fall deferred and indicated they would enroll either in spring or fall of 2021. The admissions team and department chairs continue to reach out to these students. Again, it is important to note that the School of Architecture met its 2020 Fall enrollment goal.

III. Changes or Planned Changes in the Program

Please report such changes as the following: faculty retirement/succession planning; administration changes (dean, department chair, provost); changes in enrollment (increases, decreases, new external pressures); new opportunities for collaboration; changes in financial resources (increases, decreases, external pressures); significant changes in educational approach or philosophy; changes in physical resources (e.g., deferred maintenance, new building planned, cancellation of plans for new building).

Woodbury University, 2017 Response (Revised):

a. Faculty retirement/succession planning: One full-time faculty member retired in 2018. One full-time faculty member has left WSOA.

b. Administration changes:

The School of Architecture administration has changed in response to the passing of former dean Norman Millar in 2016. Ingalill Wahlroos-Ritter is now Dean; Dr. Ewan Branda, Associate Dean;

Heather Flood, Chair of Architecture in Los Angeles; and Catherine Herbst continues as Chair in San Diego. All members of this leadership team are experienced architectural educators. Ingalill Wahlroos-Ritter has been a full-time educator at Woodbury SoA for over fifteen years. In addition to teaching, Ingalill has served in the role of Chair, Associate Dean, and now Dean of the School. Dr. Ewan Branda has been a full-time educator at Woodbury SoA for nine years. In addition to teaching, Ewan has served in the role of Assistant Chair, Graduate Chair, and now Associate Dean. Catherine Herbst has been a full-time educator at Woodbury for over fifteen years and has served as Chair in San Diego for most of them. Heather Flood is a recent Woodbury hire. Heather has over fifteen years of teaching experience, with three of these at Woodbury. In that time, she has served as Assistant Chair and now Chair of Architecture in Los Angeles. The administrative changes introduce new ways of thinking about the program and how to address the concerns outlined in this report.

c. Changes in enrollment:

See response above to the Cause of Concern: Enrollment and Funding. Our numbers are up this year compared to the same time last year. Also, we have taken steps to have our MArch program designated a STEM program. By foregrounding the technical learning outcomes in our curriculum, we are working with the Office of Academic Affairs to have our MArch program classified as STEM, without fundamentally changing the course objectives. In addition to recruiting benefits that allow international students enrolled in STEM designated programs to remain in the country for one extra year following graduation (as part of their Optional Practical Training or OPT), the STEM designation will also allow us to seek additional research funding. Faculty from programs recognized as a STEM-discipline by funding agencies, have an advantage in seeking research funding.

d. New opportunities for collaboration:

Since the NAAB visit in 2015, the School has developed external partnerships with professional offices through the Integrated Path to Architectural Licensure Program (IPAL) who are members of the consortium of firms who hire our student interns. Additionally, collaboration comes in part from sponsorships and from participation of professionals in the studio, and residency in professional offices as part of the studio experience. For example, in summer 2017, our students held the summer Fieldwork studio in the professional office of NAC, where they worked together with the Principal Michael Pinto on a real project which was a public elementary school for homeless children.

e. Changes in financial resources:

The University's Chief Financial Officer has implemented new processes as part of a larger effort led by the President for fiscal responsibility. The Business Office has implemented new accounting software and the campus budget has been incrementally tightened since 2015. The Office of Academic Affairs has placed a greater emphasis on resources for retention and ensuring our students graduate on time. Progress has been made in both areas, and efforts remain ongoing. Finally, to rely less on enrollment and tuition to ensure fiscal health, President Steele-Figueredo has emphasized developing the advancement office to increase gifts and endowments. The School of Architecture now runs a strategic advancement initiative, primarily to support student scholarships and limit dependence on tuition income.

f. Significant changes in educational approach and philosophy:

The School of Architecture at Woodbury University is among the first 14 accredited architectural programs to be accepted for participation in the National Council of Architectural Registration Board's (NCARB) Integrated Path to Architectural Licensure (IPAL) initiative. This initiative allows for the integration of the three components of licensure: Architectural Experience Program (AXP), professional education (BArch or MArch) and Architect Registration Examination (ARE). IPAL has now expanded to include 26 programs in 21 colleges across the US. Woodbury is one of three schools in California to offer it. IPAL is available to our **undergraduate** and **graduate** students on both Los Angeles and San Diego campuses.

During the past two years, we have revisited our foundations curriculum the undergraduate program. Changes to the curriculum focused on basic skills (particularly with digital tools) and introduced integrative design problems into the first-year sequence. Students are introduced to a range of architectural concepts, tools, and skills to lay the foundation for growth. Focusing on tectonics, the studio delved into materials, site, and fabrication to produce a comprehensive understanding of design. Through the design of a design a 10,000-square-foot public library, this studio uses the tectonics of structure and architecture to guide students toward rich spatial and formal investigations. The work from these newly redesigned courses was honored with a 2017 Studio Prize by Architect Magazine.

Additionally, we have recently completed a successful job search for a full-time faculty member with advanced digital fabrication skills that will help us incorporate the Making Complex more intentionally within our curriculum. The Making Complex played a vital role in our recent rethinking of the first year if our BArch program, and our Making Complex manager, a UCLA graduate with a Master of Architecture degree, is now directly involved in classroom teaching.

g. Changes in physical resources:

Since the NAAB team visit, a new lighting lab has been constructed at our Burbank campus, paid for by our Interior Architecture Title V PPOHA grant. This resource is available to all our students. Our Lighting Laboratory allows students to simulate lighting scenarios and experientially explore the effects of light on materials and space. Innovative technologies are tested, and the equipment and support staff help with the investigation of the impacts of lighting applications on the experience of human users and energy consumption.

Also funded by the PPOHA grant is a 1200 sf new metal shop, integrated with a Material Testing Laboratory on the Los Angeles campus. This is currently under construction and is scheduled to be completed by the end of this year (2018). The metal shop will house existing metal working equipment which is currently set up in the courtyard without rain protection. The new Material Testing Laboratory will provide environments to model, fabricate and test design ideas having to do with material science. In this lab, students manipulate various materials and test the results against the control environment to determine how color, surface textures, shading devices, and lighting systems change the climate, atmosphere, and perception of space.

During the past two years, we have reconfigured our design studios like a "maker space" in which the traditional studio desk is replaced by large collaborate work surfaces. We have found this to encourage the sharing of ideas and resources (such as student-owned printers and other tools) as well as more fluid movement between and model-making. To date, we have implemented these changes to the first, second-, and third-year studios.

h. Revised curricula:

Since the NAAB accreditation visit, we have implemented changes to the first year of our BArch curriculum. Attached are first year course syllabit hat have changed. Additional curricular changes for our BArch program are scheduled for AY 2018-19. Changes to our MArch programs, are scheduled for faculty review in the fall of 2018 and brought to the University Curriculum Committee in 2019.

Woodbury University, 2020 Response:

a. Faculty retirement/succession planning:

Two full-time faculty members in the architecture program have left the University since 2015, one in August 2018 and one in August 2019. In August 2020, one full-time faculty member from the department of Architecture was reassigned and appointed chair of the Applied Computer Science-Media Arts program in the School of Architecture.

b. Administration changes:

Ingalill Wahlroos-Ritter, FAIA, has served as Dean of Woodbury School of Architecture since 2016. Professors Heather Flood and Jose Parral serve as Chairs of the Architecture programs (both BArch and MArch) in Burbank and San Diego respectively, Heather since 2017, and Jose since 2018. In Fall of 2020, Dr. Branka Olson was appointed Assessment Officer of the School of Architecture. All members of the leadership team are experienced architectural educators. Ingalill Wahlroos-Ritter has been a full-time educator at Woodbury SoA since 2005. In addition to teaching, Ingalill previously served as Architecture Chair and Associate Dean. Heather has over twenty years of teaching experience, with six of these at Woodbury. In that time, she has served as Assistant Chair and now Chair of the Architecture programs. Prior to agreeing to step into the Chair position at San Diego, Jose served as Assistant Dean for one year in 2016.

In Fall of 2020, Associate Dean Ewan Branda and Assistant Chair of Architecture Ryan Martinez chose to step down from their positions to focus on professional work. The Assistant Chair position was filled by adjunct-faculty member Aaron Gensler. We took this as an opportunity to rethink the administrative structure. The Dean and chairs worked together to reorganize its leadership structure and added three part-time administrative positions (held by Architecture faculty) to support the administrative work of Architecture Chairs Heather Flood and Jose Parral. These new positions are held by Dr. Anthony Fontenot (full-time faculty member and Professor) as Criticism Coordinator, full-time faculty member and Associate Professor Linda Taalman as Building Coordinator, and adjunct faculty member Megan Groth as Practice Coordinator. They are experts in the knowledge tracks and are helping Chairs to refine the sequence of courses in each track. Additionally, Sean Joyner was brought on board as Special Projects Coordinator to support Dean Wahlroos-Ritter with Diversity, Equity, and Inclusion initiatives in the School. In addition to teaching, Sean chairs the School of Architecture Design Justice Committee (formerly the School DEI Committee) and is helping to launch a new alumni-student mentorship program.

c. Changes in enrollment:

See response above to the Cause of Concern: Enrollment and Funding. BArch enrollment has steadily increased each year for the past 5 years, including this exceptional year of 2020.

d. New opportunities for collaboration:

In Fall 2020, the Applied Computer Science-Media Arts program moved from the School of Media Culture and Design to the School of Architecture. The chair of this program is a former full-time faculty member from the Architecture program. A growing number of architecture students are now taking elective ACS-MA courses and minoring in ACS-MA. This programmatic collaboration between Architecture and ACS-MA is bringing new knowledge, new skills, and new learning methodologies to our School of Architecture students.

The School continues to develop external partnerships with professional offices through the Integrated Path to Architectural Licensure Program (IPAL) who hire our student interns. The School of Architecture has also developed 'Community Partnerships' with several professional offices in the form of sponsored studios. These collaborations bring real-world expertise into our studios, as well as resources that directly support our students. Firm sponsorships include HDR (in 2020 and 2021), Gensler (2020), and Gruen (2021).

In Fall 2020, the School of Architecture successfully applied for a \$10,000 microgrant from HDR's Designing Futures Foundation. This grant will provide funding to School of Architecture students in the form of scholarships in the spring of 2021. This grant is a signature feature of our 2020 Year of Climate Justice initiative.

e. Changes in financial resources:

Woodbury University upper administration continue to focus on fiscal responsibility. AY2019-20 was our first break-even year in several years for our budget. The Office of Academic Affairs continues to focus on retention and ensuring our students graduate on time. The two \$3 million Title V grants will provide financial support for innovative programs and initiatives in the School of Architecture.

f. Significant changes in educational approach and philosophy:

Woodbury School of Architecture continues to participate in the National Council of Architectural Registration Board's (NCARB) Integrated Path to Architectural Licensure (IPAL) initiative, which allows for the integration of the three components of licensure: Architectural Experience Program

(AXP), professional education (BArch or MArch) and Architect Registration Examination (ARE). IPAL has now expanded to include 26 programs in 21 colleges across the US. Woodbury is one of three schools in California to offer it. IPAL is available to our **BArch** and **MArch** students on both Los Angeles and San Diego campuses.

The Black Lives Matter movement has empowered our students. Students are, rightly, asking for changes to our curricula, our educational approach and philosophy. This has led to the revitalization of our School of Architecture Design Justice Committee (formerly the Diversity, Equity, and Inclusion Committee), which is implementing change and enacting new initiatives to remove barriers that have prevented the full participation of underrepresented groups in academia and architecture disciplines. These include the launch of an alumni / student mentorship program, Social Justice Scholarships to support students from underrepresented populations, and the reworking of our Studio Culture Guide by our AIAS chapter and faculty.

g. Changes in physical resources:

In 2018, a new 1200 sf Material Testing Laboratory in the Making Complex of the Los Angeles campus was completed. This was funded by our PPOHA (Promoting Post Baccalaureate Opportunities for Hispanic Americans) grant that supported our Master of Interior Design (formerly Master of Interior Architecture) program. The new Material Testing Laboratory houses a new digital loom and a kiln, and provides environments to model, fabricate and test design ideas having to do with material science.

In Summer 2020, significant capital improvement was made to the San Diego campus in the form of a new roof.

In Fall of 2020, the School of Architecture hired a Robotics Prototyping Specialist, Stephen Mansur, and acquired a 7-axis Kuka 210 Robot with a rotary table, as part of the Title V – Computer Science grant. This is in the Making Complex on the Los Angeles campus. We are developing associated coursework for Spring 2021 for BArch and MArch students.

h. Campus-wide COVID adaptations:

The two University campuses shut down in April 2020 due to COVID. To everyone's delight the semester was completed quite smoothly online. Even though the decision was made to continue distance learning/teaching online for the Fall semester, the campuses underwent a physical transformation in order to comply with the health and safety guidelines recommended by the CDC. The desire on the part of the administration was to provide limited, in-person classroom experience for faculty and students who needed it in order to maximize the academic experience. To that end, all instructional spaces were adapted to 24% capacity with minimum 6-foot social distancing and one-way ingress/egress access. Special one-on-one workstations were created with sneezeguards to allow for faculty-student interaction without direct exposure. The class schedules and classroom assignments were maintained to allow every instructor to customize their course delivery to achieve the highest and best outcomes for their students. The retrofit work was completed by late August, in time for the Fall semester.

While a majority of classes have been held online, the students have access to their respective campuses three days a week, should they need to use it. These visits can only occur on scheduled days and during pre-approved designated hours. During these assigned days, student have access to the library, computer labs, the Making Complex, and design studios through a reservation system. Inperson consultations are available with faculty and services in a controlled environment on a reservation basis. Online course delivery is conducted synchronously via RingCentral video conferencing system, as well as, other visual platforms, such as Conceptboard. Asynchronous instruction is conducted primarily through Moodle, which is also equipped with audio transcription for students with cognitive challenges. Protocols for online conduct and expectations are included in course syllabi and posted on Moodle. Students, faculty, and administration are required to complete a Los Angeles or San Diego Public Health training program prior to any campus visits. Students with

limited resources to work from home have been provided with loaner laptops and Wi-Fi hotspots on an as needed basis. Access to software platforms is made available via TeamViewer. Students and faculty have navigated the systems and processes very well.

There have been no changes due to the remote learning adaptation that we deem to have adversely impacted the program or student outcomes. A majority of our students live off campus and commute from all over the City. These students have welcomed the opportunity to take classes online. Having said that, we do have anecdotal evidence that the social and interactive aspects of the learning experience have been difficult the longer the situation continues. We believe that even after the pandemic, we will continue to explore the hybrid learning model to accommodate the demand. We would appreciate NAAB's support and feedback in pursuing this goal going forward.

i. Revised curricula:

Since the NAAB accreditation visit, Chairs Heather Flood and Jose Parral worked with architecture faculty to implement changes to the BArch and MArch curricula. Significant changes were made to the BArch curriculum including reorganization of the courses into knowledge tracks that include Practice, Criticism, and Building. The scope of each knowledge track was refined, and course continuity strengthened to ensure that students are appropriately progressing through the sequence of courses. Both the Building and Practice tracks were amplified, with increased focus on building technology, emerging material fabrication, and professional practice. These changes were approved by the University Curriculum Committee in 2019. At the same time adjustments were made to our MArch curriculum to respond to concerns raised by the last NAAB Visiting Team, particularly to the Criticism courses.

All programs in the School of Architecture, including BArch and MArch, are federally designated STEM programs since Fall 2019.

IV. Summary of Preparations for Adapting to 2020 NAAB Conditions

Please provide a brief description of actions taken or plans for adapting your curriculum/ classes to engage the 2020 Conditions.

Woodbury University, 2020 Response:

Working with faculty and staff, School of Architecture leadership have taken steps at the program level to adapt our BArch and MArch curricula to engage the 2020 Conditions, and at the School level to ensure that the 2020 Shared Values of the Discipline and the Profession permeate the culture of the School and are part of our strategic and long-range planning efforts.

Program Criteria (PC) + Student Criteria (SC): Student Learning Objectives and Outcomes

Following are actions Chairs Heather Flood and Jose Parral have taken to adapt our BArch and MArch curricula to the 2020 Conditions:

- 1. Redefined student performance criteria for each course in the BArch and MArch curricula (Summer 2020)
- 2. Developed a new curriculum matrix for BArch and MArch programs (Summer 2020)
- 3. Revised syllabi templates with learning outcomes that reflect the new PC's and SC's (Summer 2020)

Following are steps we will be taking for future curricular and assessment plan development (starting Spring 2021):

Curriculum

- 1. Integration of Building, Criticism and Practice Coordinators into curriculum revision process.
- 2. Refine NAAB matrix and course learning outcomes for each subject-matter track.

Assessment

- 1. Develop a revised assessment plan for BArch and MArch programs to include key program criteria (PC), Student Criteria (SC), and WSCUC Core Competencies.
- 2. Identify high-concentration courses that will be assessed regularly and develop rubrics for these.
- 3. Develop a peer-review process for capstone courses for each subject-matter track, and a reporting structure to identify course-specific successes and challenges to close the assessment loop.
- 4. Integrate assessment components between NAAB, WSCUC (University), and Woodbury University institutional learning outcomes.
- 5. Identify person responsible for authoring the NAAB self-study document.
- 6. Streamline organizational framework that would aggregate student work into specific topics for purposes of assessment.

The revised BArch and MArch matrices submitted in this document indicate the updated distribution of the 2020 NAAB Program Criteria (PC) and Student Criteria (SC) in the BArch and MArch curricula.

Shared Values of the Discipline and the Profession

In the summer of 2018, Woodbury School of Architecture launched a strategic planning initiative. The process began with a summer retreat by chairs, staff, and Dean, that resulted in an overarching vision titled 'The Future of Practice.' The team's primary question: where is the discipline headed? Fall 2018 and Spring 2019 retreats with all full-time faculty were held to articulate the vision, along with self-selected smaller groups of faculty to consider the recrafting of existing programs, as well as possible innovative new programs. Fall of 2019 saw a series of faculty meetings led by the Dean to craft School mission and vision statements, and to establish strategic goals. There is significant alignment between the strategic goals and the 'Shared Values of the Discipline' as outlined in the 2020 Conditions. Following are further actions that have been taken to align the Woodbury School of Architecture Strategic Plan with the NAAB Shared Values of the Discipline and the Profession:

a. Design

The response for 2017 (Revised) that refers to Design (Defining Perspective) is unchanged. At the core of the mission of the School of Architecture is the development of design excellence. At the core of our vision is the application of design excellence in service to social justice issues and to improve the lives of others.

b. Environmental Stewardship and Professional Responsibility

Goal 2 of our Strategic Plan is to create an arena of ideas that foster diverse values and address the pressing issues of our time, as well as to implement commitment to climate action as an affirming value of the School.

In 2019, Chairs Heather Flood and Jose Parral worked with faculty to reconsider the BArch curriculum. Curricular changes included adding multiple courses to the Building track courses (now consisting of 6 courses) with renewed focus on environmental stewardship. With the addition of a Practice course, the Practice track now consists of 3 courses, each of which have learning outcomes which address the architect's professional responsibility towards environmental stewardship throughout the design process and beyond.

In 2020, Dean Wahlroos-Ritter declared a Year of Climate Justice. This has resulted in the 2020-21 lecture series devoted to BIPOC speakers focused on climate change and environmental justice, faculty grants to encourage research and development of new courses in this area, and student scholarships for projects addressing climate change, environmental justice and BIPOC perspectives.

c. Equity, Diversity, and Inclusion

In 2013, The School of Architecture began a transformational process to address the role of faculty,

staff, administrators, and students in increasing participation of individuals from groups that have been underrepresented and underserved in higher education and in the professional disciplines of our programs. The central vehicle for this initiative was the generation of a School of Architecture Diversity Plan by a committee that consisted of SoA faculty and staff, and University administrators. In 2020, the committee was renamed the Design Justice Committee, and the Plan recrafted to incorporate student voices empowered by historical protests worldwide.

The Design Justice Committee has implemented an action plan with four goals: Goal 1. Speak up for change - foster an environment that respects and welcomes differences, amplifies student voices, communicates with transparency and urgency, and celebrates inclusivity. Goal 2. Build New Pathways - craft pathways to guarantee access, opportunity, and advancement for all students, faculty, and staff in every stage of Woodbury education and career development. Goal 3. Diversify Teaching & Scholarship - develop a more inclusive pedagogy, and considers all forms of diversity, equity, and inclusion as they affect the educational process. Goal 4. Economic Justice - establish partnerships and external alliances that provide resources to eliminate economic barriers that prevent the full participation of underrepresented groups. Some highlights of this plan that have already been implemented as of Fall 2020 include a new Social Justice Scholarship fund to support students from underrepresented groups, hiring BIPOC adjunct faculty, the launch of a mentorship program for LAUSD High School students at the STEM Academy of Hollywood, and free summer high school courses for college credit.

d. Knowledge and Innovation

This Shared Value is codified in two of the strategic goals of our School:

Goal 1 - Foster excellence in teaching and learning and transform our students into ethical, articulate, and innovative design professionals prepared to lead in a world of accelerating technological change. (Chairs Heather Flood and Jose Parral have reworked the BArch and MArch curricula to meet Strategy 1 of this goal, which is 'to develop rigorous curricula that respond innovatively to challenges of the future.')

Goal 3 - Develop new programs that help produce graduates who affirm the power of design to improve the built environment and the lives of others.

The School of Architecture is launching three new programs that respond to ever-changing conditions, advance cultural forces, drive innovation, and prompt the continuous improvement of the discipline.

- Applied Computer Science-Media Arts (Fall 2020) + Design Computation (Fall 2022)

- Sustainable Practices (Fall 2021)

- Construction Management (Fall 2022)

These programs will bring new knowledge, new faculty and novel resources to the School of Architecture that will benefit BArch and MArch students and faculty.

e. Leadership, Collaboration and Community Engagement

Black Lives Matter has empowered our students as never before. In summer of 2020, the School brought together all of the leaders of the five student organizations housed within the School of Architecture (AIAS-LA, AIAS-SD, NOMAS, CLEA, IIDA) into a single Student Leadership Group to meet with program chairs, faculty, the Director of Outreach, the Director of Communications, and the Dean and to provide input into School initiatives, and to work collaboratively on projects.

A signature program of the School of Architecture is the Agency of Civic Engagement (ACE), now over 10 years old. ACE, connects students and faculty with nonprofit and governmental organizations

that are dedicated to helping underserved communities. Students work collaboratively across Woodbury's disciplines to combine their skills and test their fields of study on real projects for the public good. Past ACE projects have provided these community partners with three main services:

- the design and construction of architectural amenities
- graphic design for urban and public areas
- cultural awareness for a racially disenfranchised neighborhood
- business acumen for non-profits and public services.

f. Lifelong Learning

At the core of our programs and co-curricular initiatives is a commitment to developing professional leadership skills in our students. Our undergraduate and graduate curricula focus on professionalism and leadership in multiple Professional Practice courses. These professional practice courses encourage our students to understand (and enroll in) AXP, introduce students to ethical and legal practices within the profession, and focus on new knowledge and emerging leadership roles architects must embrace for sustainable development of our globalized environment.

Every BArch student is required to complete work experience as a part of the degree requirements. Our Career Office is staffed by an architect, Catherine Roussel, AIA, who helps students prepare professional resumes and portfolios, organizes career fairs, supports their steps toward licensure, and is continuously seeking new professional opportunities for our students.

Our commitment to making licensure a clear prospect for all students in our professional programs is demonstrated through our dedication to the Integrated Path to Architectural Licensure (IPAL) program, an NCARB initiative. We continue to have approximately 30 BArch and MArch students in this program and an equal number of professional offices in our IPAL Consortium who hire our students. These students are in various stages of taking the architectural licensing examination.

V. Appendix (include revised curricula, syllabi, and one-page CVs or bios of new administrators and faculty members; syllabi should reference which NAAB SPC a course addresses. Provide three examples of low-pass student work for SPCs in the following cases--if there are any SPCs that have not been met for two consecutive visits, or If there are three not-met SPCs in the same realm in the last visit--as required in the Instructions.)

Woodbury University, 2020 Update: Must include student work evidence for A.9 (M. Arch), B.1 (B. Arch and M. Arch), B.2 (B. Arch and M. Arch), B.3 (M. Arch), B.4 (M. Arch), B.7 (B. Arch), and C.1 (M. Arch): SEE SEPARATE ZIP FILE ATTACHMENT

V. Appendix

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Student Work Evidence

Attached folder "Student Work"

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 $\ensuremath{\text{CVs}}$ of new administrators and faculty members

Ingalill Wahlroos-Ritter, FAIA Dean and Professor

Courses Taught (Spring 2015 - Spring 2020)

Summer 2016 ARCH 4753 / INAR 3703 Foreign Study Studio and Seminar: Japan Fall 2016 ARCH 544 Building 1: Matter and Making Spring 2017 ARCH 692 Thesis Studio

Spring 2017 ARCH 692 Thesis Stud

Educational Credentials

1990	MArch, U	niversity of	of Cali	fornia,	Los	Angeles
400-	DA 11 1		1.6		•	

1987BA, University of California, Los Angeles

Teaching Experience

2005-present	Woodbury University Professor, Associate Professor, Assistant Professor
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2003-2006 Yale University, New Haven, CT, Lecturer

- 2003-2005 Southern California Institute of Architecture, Tech Coordinator, Full-time Faculty
- 2002-2003 The Bartlett, University College of London, London, UK, Unit Tutor
- 2002-2003 Oxford Brookes University, Oxford, UK, Unit Tutor

1999-2002 Cornell University, Ithaca, NY, Visiting Professor

Professional Experience

2016-present	Dean. V	Voodburv	School	of Architecture
2010 present	Doun, v	voodbury	0011001	or / a or nicootar o

- 2002-present [WROAD] Los Angeles, a partnership practice of architecture with Roland Wahlroos-Ritter
- 2016-present Advisory Board Member, Los Angeles Forum for Architecture and Urban Design
- 2009-2020 Director, WUHO Gallery
- 2014-2017 AIA|LA Board of Director
- 2002-2008 Dewhurst Macfarlane & Partners, Senior Associate, Director, Los Angeles office
- 1999-2003 Ingalill Wahlroos Architects, New York, sole practitioner
- 1994-1999 Smith-Miller+Hawkinson Architects, New York, NY, project architect
- 1998-1999 Venturi Scott Brown and Associates, New York, NY, architect

Licenses/Registration

- 1994 State of California
- 1999State of New York (dormant)

#### Selected Publications and Recent Research

- 2020 'Beyond Style' in Regarding Paul R. Williams: A Photographer's View, Janna Ireland, Angel City Press.
- 2019 Most Admired Educator, DesignIntelligence.
- 2018 Elevated to AIA College of Fellows.
- 2018 Educator of The Year, Presidential Honoree, AIA|LA.
- 2018 'The Power of Micro-Choices,' in ARCHITECT, The Journal of the AIA, Hanley Wood, Washington D.C.
- 2017 Most Admired Educator, DesignIntelligence.
- 2016 Distinguished Educator Award, AIA California.
- 2016 'Fieldwork Tahiti' in MANAVA, Le Centre des Métiers d'Art de la Polynésie Française, Tahiti.
- 2015 'Architectural Agency: Challenging Boundaries of Exclusion,' presentation at 18th UIFA Congress, VTA.
- 2015 'Exposing Women,' paper presentation, Architecture&Feminism Conference, Parsons School of Design.
- 2014 'Off-Site' in Beyond Environment, Emanuele Picardo, Actar Publishers, New York.
- 2014 'Deborah Sussman (1931-2014),' in *Artforum*, New York.
- 2013 'Bloom,' in Materials & Applications: Building Something Beautiful, Univ. Art Museum, Long Beach.
- 2013 'Beyond Environment,' Graham Foundation Grant, with Amit Wolf and Emanuele Picardo.
- 2013 'Fieldwork Tahiti: Houses of Flux,' paper presentation at ACSA Sub-Tropical Cities Conference, Miami.
- 2012 'Lättsinnig,' in *Light My Fire, Stranger,* exhibition at MAK Institute, Los Angeles.
- 2011 'Bloom,' Graham Foundation Grant, with Doris Sung and Matthew Melnyk.
- 2011 'Ingalill Wahlroos-Ritter,' in Architecture: A Woman's Profession, Tanja Kullick (ed.), Jovis, Berlin.
- 2011 'Bloom,' installation at M&A Gallery, with Doris sung and Matthew Melnyk.

Professional Membership

The American Institute of Architects

Woman-Owned Business Certification, New York State

#### Heather Flood Professor and Chair of Architecture, Los Angeles

#### Courses Taught (Fall 2017 Fall 2020)

- ARCH 4932 Open Studio: Modular Housing
- ARCH 366 Contemporary Issues: Mod Haus
- ARCH 583 Graduate Studio One
- ARCH 101 Undergraduate Studio One
- ARCH 432 Undergraduate Degree Project Studio
- ARCH 301 Undergraduate Studio Six
- ARCH 102 Undergraduate Studio Two
- ARCH 114 Design Communication 1
- ARCH 211 Design Communication 2

Educational Credentials

- 2003 MArch, the Southern California Institute of Architecture
- 1994 BArts, Michigan State University

Teaching Experience

Woodbury University School of Architecture, Professor 2015 – present Woodbury University School of Architecture, Chair Los Angeles The Southern California Institute of Architecture, Full-Time Faculty 2003-2015 UCLA Department of Architecture, Visiting Lecturer 2005

#### **Professional Experience**

2007-Present	F-Lab, Principal, Los Angeles
2003-2007	HOLA, Partner, Los Angeles
2000-2003	ROTO Architects, Designer, Los Angeles
1998-2000	HOLST Architecture, Designer, Portland
1996-1998	Murphy, Burnham & Buttrick Architects, New York

Selected Publications and Presentations

	2019 - Present	Journal of	Architectural	Education,	Editorial Board
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- 2018 ACSA Topic Chair, *The First Hundred Days*
- 2018 NCBDS Special Panel, *The Gendering of Beginning Design*
- 2018 Drawing Codes Exhibition, *The Tectonic Image*
- 2017 architecture, architectura & Architecture Exhibition, *Tectonic Thinking*
- 2017 On-Night Stand Installation, *Intimate Encounters*
- 2017 ACSA Presentation, *Tectonic Painting: The Dome*
- 2017 ARCHITECT Magazine Studio Prize, Teaching Award
- 2016 NCBDS Paper and Presentation, *From 1:1 to 31:31 or How to Leverage the Laws of Exponential Growth in Architectural Education*
- 2014 SCI-Arc Gallery Installation, Tectonic Painting: Punk'd
- 2014 Pasadena Art Alliance, Grant, \$6,000
- 2012 Los Angeles Municipal Art Gallery Installation, Tectonic Painting: Wonder Wall
- 2012 Los Angeles Artist Fellowship Laboratory, Grant, \$3,000
- 2012 C.O.L.A. Individual Artist Fellowship, Grant, \$10,000
#### Jose Parral Professor, Chair, Architecture San Diego

Courses Taugh	<u>t (Fall 2017 – Fall 2020)</u>
ARCH 101	Studio One Fall 2020
ARCH 201	Studio Three Fall 2020
ARCH 334	Urban Design Theory Summer 2020
ARCH 267	World Architecture I Spring 2020
ARCH 555	Criticism 2: Architecture to Modern Fall 2019
ARCH 281	Design Studio 2A: Program and Space Fall 2019
ARCH 692	Graduate Thesis Studio Summer 2019
LARC 5712	Ecology Environment and Materiality 4 Spring 2018
LARC 5711	LARC Studio 4: Nontraditional Projection Spring 2018
ARCH 489	Design Studio 4B: Urbanism Spring 2018
ARCH 554	Criticism 1: Fieldwork Los Angeles Fall 2018
ARCH 383	Design Studio 3A: House and Housing Fall 2018
ARCH 120	Contemporary Architecture Culture Fall 2018
LARC 5708	LARC Studio 3: Projections of Landscape Fall 2017
ARCH 648	Criticism 4: Arch Research Salon Fall 2017
ARCH 587	Graduate Studio 3: Infrastructure Fall 2017

**Educational Credentials** 

2001 MA Landscape Urbanism, Architectural Association School of Architecture

1996 BA Landscape Architecture, University of California at Berkeley

Teaching Experience

Woodbury University School of Architecture: Professor 2008-present Architectural Association Visiting School (Mexico City) 2015 RMIT University, One-week Workshop 2011 The Ohio State University, Knowleton School of Architecture, Visiting Lecturer 2006

Professional Experience

2008-present josetasi, Director
1996-2004 Spurlock Poirier Landscape Architects, Project Manager
1997-1998 Pamela Burton Landscape Architects, Designer

Selected Publications and Recent Research

2015 "Alles ist Wechselwirkung", with Armando Oliver Suinaga, Arquine

2007 "Supernatural: Urban Fluctuations and the alter ego of self and planned organizations" Fluctuating Borders: Memory and the Emergent New possibilities for International Borders, Rosalea Monacella, Dr. SueAnne Ware eds.; RMIT Publications

Professional Membership

Fellow, American Academy in Rome

#### Branka V. Olson, PhD Assessment Officer

#### Courses Taught (Spring 2017 - Spring 2021)

- INAR 258 Building Systems and Codes (Spring 2017-2021)
- INAR 252 Space Planning (Fall 2019-2021)
- INAR 106 Design Studio 2: 3-D Design II (Spring 2021)

INDS 340 Human Agency and Interior Spaces (Fall 2018-2021)

INDS 350 Interdisciplinary Research (Spring 2020)

#### Educational Credentials

- 2016 PhD, Management: Designing Sustainable Systems, Weatherhead School, Case Western University
- 1981 MArch, Taubman School of Architecture, University of Michigan
- 1979 BS Architectural Studies, University of Illinois
- 1979 BS Interior Design, University of Illinois

Teaching Experience

Woodbury University School of Architecture: Adjunct Faculty Woodbury University School of Liberal Arts: Adjunct Faculty

Professional Experience

1998-present	Sindik Olson Associates, Inc., Los Angeles, CA, Founding Principal
1989-1998	Steinmann, Grason, Smylie, Los Angeles, CA, Pre-design Studio, Director
1982-1987	Skidmore, Owings & Merrill, Los Angeles, CA

Licenses/Registration

Registered Architect, State of California Certified Interior Designer, CCIDC

Selected Publications and Recent Research

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2020	"Improving the Quality of Work Life: An Interdisciplinary Lens into the Worker Experience," Handbook of Workplace Wellbeing: Reimagining Human Flourishing, eds: Professor Satinder Dhiman, PhD, EdD. Palgrave Publishing Major Reference Works.
2020	"Workplace of ONE: Worker Experience as the Basis for Workplace Design", <i>Amps</i> PARADE International Conference: Experiential Design – Rethinking relations between people, objects and environments, Florida State University, Tallahassee, FL.
2019	"Worker Experience: Improving the Quality of Work-life through Human-Centeredness, "Academy of Management Annual Conference, Professional Development Workshop, Boston, MA.
2018	"Relational Building Teams: Turning the Cost of Waste into Sustainable Benefits," Handbook of Engaged Sustainability: Contemporary Trends and Future Prospects, eds: J. Marques, S Dhiman, Springer International Publishing AG.
2017	"Integration of Factors that Affect the Engagement and Performance of Workers in Workplace: Worker-centered Approach", Environmental Design Research Conference, Panel Discussion, Madison, WI.
2016	"Dialectic of Workspace Design: Team Coherence Effects on Project Outcomes," Engaged Management Scholarship Conference, Paris, France.
2015	"Does Workplace Matter? Perceived Satisfaction with Physical Workplace as Drive of Worker Performance," in International Journal of Facility management, Volume 6, Issue 1, IFMA.

<u>Professional Membership</u> American Institute of Architects (AIA) Environmental Design Research Association (EDRA) Academy of Management (AOM)

#### Sean Joyner Adjunct Faculty / Special Projects Coordinator

Courses Taught (Fall 2020) ARCH 201 Studio Three, Fall 2020

Educational Credentials 2016 BArch, Woodbury University

<u>Teaching Experience</u> Woodbury University School of Architecture: Adjunct Faculty 2020-present

Professional Experience

2019-presentArchitect, Staff Writer2018-2019Architecture for Education, Project Leader2016-2018NAC Architecture, Designer

Licenses/Registration

N/A

Selected Publications and Recent Research

2020	Black Tokenism in Architectural Practice, Archinect
2020	Undoing Apartheid Architecture with Wandile Mthiyane, Archinect
2020	Juneteenth and the Villa that Became a Legend, Archinect
2019	The Importance of Physical Health in Mental Performance, Archinect

Professional Membership

N/A

### Anthony Fontenot Professor

#### Courses Taught (Fall 2011 - Fall 2020)

	-				
ARCH 341		(undergraduate	Criticism 3: Archit	tectural Theory,	Fall 2013-present

- ARCH 342 (undergraduate/graduate) Criticism 4: Contemporary Issues, Fall 2018, 2019, 2020
- ARCH 556 (graduate) Criticism 3: Architecture from Modern (1945-now), Spring 2015-present
- ARCH 489 (undergraduate) Studio 4B, Spring 2019 and 2020
- ARCH 691 (graduate) Studio 5, Fall 2016
- ARCH 692 (graduate) Coordinator and Advisor, Thesis Studio, Spring 2012, 2014, and 2015
- ARCH 489 (graduate) Urbanism Studio, Fall 2011, 2012,
- ARCH 584 (graduate) Studio 2: Housing, Spring 2013, 2014, 2016

#### **Educational Credentials**

2013 Doctor of Philosophy in the History, Theory, and Criticism of Architecture, Princeton University

1996	Master of Architecture, Southern California Institute of Architecture (SCI-Arc)

1988Bachelor of Architecture, University of Louisiana

### Teaching Experience

Woodbury University School of Architecture: Professor 2011-present Princeton University School of Architecture: Adjunct Faculty, 2008 Tulane University School of Architecture: Visiting Faculty and Adjunct Faculty,2000-2005 Louisiana State University School of Architecture: Adjunct Faculty,1999-2000

#### Professional Experience

2017-present	Planning Consultant to the Aga Khan Trust for Culture for the Kabul Riverfront
	Transformation Master Plan, Kabul, Afghanistan
1996-1998	Office for Metropolitan Architecture/ Rem Koolhaas, Rotterdam, the Netherlands
1996	Frank O. Gehry & Associates, Santa Monica, CA

### Licenses/Registration

#### Selected Publications and Recent Research

- 2021 *Non-Design: Architecture, Liberalism, and the Market* (forthcoming University of Chicago Press, 2021)
- 2022 *Gregory Ain: Low-Cost Modern Housing and the Construction of a Social Landscape* (forthcoming MIT Press, 2022)
- 2022 (chapter) "Activating Medellín and the Politics of Citizen Engagement" in *All-Inclusive Engagement in Architecture*, eds., Farhana Ferdous and Bryan Bell (forthcoming Routledge, 2022)
- 2018 (chapter) "Streit um die Bauhauskonzeption: Hannes Meyer gegen László Moholy-Nagy" (English translation: "The Battle Over Bauhaus Design: Hannes Meyer Versus László Moholy-Nagy") in *Hannes Meyers Bauhauslehre Von Dessau nach Mexiko*, ed. Philipp Oswalt (Birkhäuser Verlag, 2018)
- 2014 Michael Sorkin, Carol McMichael Reese, Anthony Fontenot, *New Orleans Under Reconstruction: The Crisis of Planning*, New York: Verso Books, 2014.

# Exhibitions:

- 2019 *Floating Cities*, April 9-May 5, 2019, *WUHO Gallery*, Hollywood, Los Angeles. Funded by a Woodbury University Faculty Grant Award and a Platforms Grant.
- 2015 *Gregory Ain: Low-Cost Modern Housing and the Construction of a Social Landscape*, April 4-26, 2015, *WUHO Gallery*, Hollywood, Los Angeles. Funded by a Woodbury University Faculty Grant Award.

### Megan Groth Practice Coordinator

Courses Taught (Fall 2019 - Spring 2021)

ARCH 462Professional Practice 3, Spring 2021ARCH 250Professional Practice 1, Fall 2019

Educational Credentials

2016 MSc City Design & Social Sciences, London School of Economics & Political Science

2012 MArch, University of Washington

2006 BA Biology, Pomona College

Teaching Experience

Woodbury University School of Architecture, Adjunct Faculty 2019-Present Oxford Brookes University, Technology Tutor 2016-2018 University of Washington, Teaching Assistant 2011-2012

Professional Experience

2016-2018	LSE Cities, Publication Coordinator & Assistant Editor
2012-2015	GGLO, Intern Architect
2013-2014	City of Seattle Design Commission, Commissioner
2010-2011	Aalto University Wood Program, Valle Scholar & Project Manager
2008	Habitat for Humanity Mexico, Volunteer Coordinator for Lent Build 2008
2008	DeBoer Architects, Intern
2006-2007	Thomas J. Watson Fellowship, Fellow for International Bamboo Building Research

Licenses/Registration

Active NCARB Licensure Candidate, California

Selected Publications and Recent Research

2018	"Dynamics of the Urban Age" in Shaping Cities in an Urban Age, eds: Ricky Burdett, Philipp Rode.
	Phaidon, New York.

- 2018 "Teaching the Value of Work," in *Ardeth Journal #03 Money*, ed Jerermy Till. Rosenberg & Sellier, Turin.
- 2016 *LSE City Design Studio Publication,* editor. London School of Economics & Political Science, London.
- 2016 *Conflicts of an Urban Age*, Research Assistant for LSE Cities Exhibition at the 15th International Architecture Biennale in Venice, Italy.
- 2010 *Column 5 Student Journal of the Department of Architecture,* editor. University of Washington, Seattle.
- 2009 "Home Grown: Overcoming the Stigma of Bamboo Housing in Latin America," in *Column 5 Student Journal of the Department of Architecture*. University of Washington, Seattle.
- 2009 *Bamboo Building Essentials: The Eleven Basic Principles*, co-written with Darrel Deboer. Self published.

<u>Professional Membership</u> San Diego Architecture Foundation The Architecture Lobby NAAB SPC Matrices

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BArch Curriculum Map																									air					
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NAAB PC Program Criteria					(1)	(1)	7	7	7	7			(1)	(1)	7		(1)	(1)	7	7	7		(1)	7						
<b>PC.1 Career Paths:</b> How the program ensures that students understand the																														
paths to becoming licensed as an architect in the United States and the																														
<b>ARCH 262:</b> Examine fundamental definition of the professional role of a																													-	
licensed architect																														
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<b>ARCH 362:</b> Describe project development including financial processes.																														1
ARCH 462: Evaluate different models of practice in relation to career																														
exploration and the future of practice.																														
<b>PC.2 Design:</b> How the program instills in students the role of the design																														
process in shaping the built environment and conveys the methods by which																														
design processes integrate multiple factors, in different settings and scales																														
of development, from buildings to cities.																														_
ARCH 101: Illustrate the inter-relationship between media of design including	3																													1
modeling and drawing.																													$\square$	
ARCH 102: Identify and arrange tectonic elements.																														
ARCH 201: Translate geometry into form.																														
ARCH 241: Identify architects' leadership roles in the design process																														1
including the selection and coordination of allied disciplines, post-occupancy																														
evaluation, and facility management.																														
APCH 202: Recognize and dealey organizational principles	-																												-	
		<u> </u>				<u> </u>		-			-																		-+	
ARCH 242: Identify architects' leadership roles in the design process																														ı
including the selection and coordination of allied disciplines, post-occupancy																														i.
evaluation, and facility management.																														i.

BArch Curriculum Map	Τ																								air					
June 2020	idio One	idio Two	idio Three	idio Four	idio Five	idio Six	idio Seven	idio Eight	idio Nine	idio Ten	ticism One: World Arch & Urb 1	ticism Two: World Arch & Urb 2	ticism Three: Architectural Theory	ticism Four: Contemporary Issues	ticism Five: Degree Project Research	ilding One: Intro to Mat & Meth	ilding Two: Intro to Structures	ilding Three: Advanced Structures	ilding Four: Intro to Systems Int	ilding Five: Advanced Systems Int	ilding Six: Advanced Mat & Meth	ofessional Practice 1	ofessional Practice 2	ofessional Practice 3	reer Services - IPAL / Work Exp / Career Fai	blic Programming - Lectures / Exhibitions	Ident Organizations - AIAS / NOMA / CLEA	titutes - ACE / Shulman	arly Themes - Housing / Climate / Water	w Programs - ACS / Sustainable Practices
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	101	102	201	202	301	302	401	402	430	431	241	242	341	342	441	122	321	322	421	422	423	262	362	462						
ARCH 301: Identify, catalog, and respond to an urban context.																														
ARCH 341: Examine and debate principles present in relevant precedents.																														
ARCH 302: (1) Generate sensitive relationships between building types, structural systems and form . (2) Identify, catalog, and respond to site conditions.																														
<b>ARCH 401:</b> Demonstrate the relationship between schematic design, design development, and construction documents in the development of a design proposal.																														
ARCH 402 and 430: Define a scope of inquiry and evaluate outcomes.																														
<b>ARCH 431:</b> Define a working method that integrates formal, spatial, and tectonic elements; that responds to geographic context; and that embodies conceptual frameworks.																														

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June 2020	tudio One	tudio Two	tudio Three	tudio Four	tudio Five	tudio Six	tudio Seven	tudio Eight	tudio Nine	tudio Ten	riticism One: World Arch & Urb 1	riticism Two: World Arch & Urb 2	riticism Three: Architectural Theory	riticism Four: Contemporary Issues	riticism Five: Degree Project Research	uilding One: Intro to Mat & Meth	uilding Two: Intro to Structures	uilding Three: Advanced Structures	uilding Four: Intro to Systems Int	uilding Five: Advanced Systems Int	uilding Six: Advanced Mat & Meth	rofessional Practice 1	rofessional Practice 2	rofessional Practice 3	areer Services - IPAL / Work Exp / Career F	ublic Programming - Lectures / Exhibitions	tudent Organizations - AIAS / NOMA / CLE	ıstitutes - ACE / Shulman	early Themes - Housing / Climate / Water	ew Programs - ACS / Sustainable Practices
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<b>PC.3 Ecological Knowledge and Responsibility:</b> How the program instills in students a holistic understanding of the dynamic between built and natural environments, enabling future architects to mitigate climate change responsibly by leveraging ecological, advanced building performance, adaptation, and resilience principles in their work and advocacy activities.																														
<b>ARCH 122:</b> Compose architectural elements that optimize, conserve, or reuse resources, provide healthful environments for occupants/users, and reduce the environmental impacts of building construction and maintenance.	2																													
<b>ARCH 241:</b> Evaluation of basic ecological principles and architects' responsibilities with respect to environmental and resource conservation in architecture and urban design.																														
ARCH 301: Understanding the impact of urban and site development on climate justice.																														
<b>ARCH 341:</b> Appraisal of local, regional, national and global settings in relation to their climatic, ecological, technological, and cultural factors.																														
<b>ARCH 302:</b> Appraise structure and building performance towards responsible ecological acclimatization.																														
ARCH 401: Identify and respond to issue of climate justice in building proposals.																														
<b>ARCH 422:</b> Arrange basic principles involved in the appropriate application of building envelope systems and associated assemblies relative to sustainable and ethical issues.																														

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<b>ARCH 423:</b> Measure architectural elements that optimize, conserve, or reuse resources, provide healthful environments and reduce the environmental impacts of building construction and maintenance.																														
<b>PC.4 History and Theory:</b> How the program ensures that students understand the histories and theories of architecture and urbanism, framed by diverse social, cultural, economic, and political forces, nationally and globally.																														
<b>ARCH 241:</b> Describe and discuss traditions of architecture, landscape and urban design including examples of indigenous, vernacular, local, regional, national and global settings in terms of their climatic, ecological, technological, socioeconomic, public health, and cultural factors.																														
<b>ARCH 242</b> : Write and discuss traditions of architecture, landscape and urban design including examples of indigenous, vernacular, local, regional, national and global settings in terms of their climatic, ecological, technological, socioeconomic, public health, and cultural factors.																														
<b>ARCH 341:</b> Examine canons and traditions of architecture, landscape and urban design.																														

BArch Curriculum Map June 2020	Studio One	Studio Two	Studio Three	Studio Four	Studio Five	Studio Six	Studio Seven	Studio Eight	Studio Nine	Studio Ten	Criticism One: World Arch & Urb 1	Criticism Two: World Arch & Urb 2	Criticism Three: Architectural Theory	Criticism Four: Contemporary Issues	Criticism Five: Degree Project Research	Building One: Intro to Mat & Meth	Building Two: Intro to Structures	Building Three: Advanced Structures	Building Four: Intro to Systems Int	Building Five: Advanced Systems Int	Building Six: Advanced Mat & Meth	Professional Practice 1	Professional Practice 2	Professional Practice 3	Career Services - IPAL / Work Exp / Career Fair	Public Programming - Lectures / Exhibitions	Student Organizations - AIAS / NOMA / CLEA	Institutes - ACE / Shulman	Yearly Themes - Housing / Climate / Water	New Programs - ACS / Sustainable Practices
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<b>PC.5 Research and Innovation:</b> How the program prepares students to engage and participate in architectural research to test and evaluate innovations in the field.															-									-						
<b>ARCH 322:</b> Examine types of structural systems towards novel form or vice versa.																														
<b>ARCH 342</b> : Compare and debate current architectural concepts and hypothesize interests within discourse.																														
<b>ARCH 422:</b> Compose formal and material systems through outlined research.																														
ARCH 441: Compose a degree project proposal from argumentation, methodology, and preconditions based on a body of architectural research.																														
<b>ARCH 423:</b> Assemble formal and material systems through outlined research.																														

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PC.6 Leadership and Collaboration: How the program ensures that																														
students understand approaches to leadership in multidisciplinary teams,																														
diverse stakeholder constituents, and dynamic physical and social contexts,																														
and learn how to apply effective collaboration skills to solve complex																														
problems.																														
<b>ARCH 262:</b> Develop communication skills to convey project ideas to the																														
client and design team.																														
<b>ARCH 362</b> : Examine interdisciplinary collaboration to meet project goals.																														
ARCH 462: Compose collaboration on a creative project, incorporating																														
individual goals and a broader purpose.																														
<b>PC.7 Learning and Teaching Culture:</b> How the program fosters and ensures																														
a positive and respectful environment that encourages optimism, respect,																														
sharing, engagement, and innovation among its faculty, students,																														
administration, and staff.																														
ARCH 101: Discuss ideas and methods in desk crits and pin-ups.																														
ARCH 102: Discuss ideas and methods in desk crits and pin-ups.																														
ARCH 201: Engage in class discussions and reviews.																														
ARCH 202: Engage in class discussions and reviews.																														
ARCH 301: Participate in group activities.																														
ARCH 302: Participate in group activities.																														
ARCH 401: Present, discuss, and debate work in a public forum.										1																			$\top$	-
ARCH 402: Present, discuss, and debate work in a public forum.																													$\square$	
ARCH 430: Discuss and debate the work of peers.																													$\square$	
ARCH 431: Discuss and debate personal work and the work of peers in a																													$\uparrow$	
respectful manner. Process feedback of others in the development of work.																														
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<b>PC.8 Social Equity and Inclusion:</b> How the program furthers and deepens students' understanding of diverse cultural and social contexts and helps them translate that understanding into built environments that equitably support and include people of different backgrounds, resources, and abilities.																														
<b>ARCH 241:</b> Illustrate research of the ethical issues involved in the formation of professional judgment regarding social, political and cultural issues in architectural design and practice.																														
<b>ARCH 262:</b> Identify and discuss ethical issues in architectural design and practice.																														
<b>ARCH 242:</b> Examine ethical issues involved in the formation of professional judgment regarding social, political and cultural issues in architectural design and practice.																														
<b>ARCH 301:</b> Identify a range of community stakeholders with diverse physical and mental abilities and to translate that understanding into the built environment.																														
<b>ARCH 341</b> : Debate the discipline's responsibility to work in the public interest, to respect historic resources, and to improve the quality of life for local and global neighbors.																														

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NAAB SC Student Criteria					·																										
<b>SC.1 Health, Safety, and Welfare in the Built Environment:</b> How the program ensures that students understand the impact of the built environment on human health, safety, and welfare at multiple scales, from buildings to cities.																															
<b>ARCH 122</b> : Recognize basic principles of health, safety and welfare utilized in the appropriate selection of construction materials, products, components, and assemblies.																															
<b>ARCH 262</b> : Interpret health, safety and welfare concerns, including fire, egress, energy use, accessibility and wellness.																															
<b>ARCH 321:</b> Explain fundamental process of structural system analysis in relation to Heath, Safety and Welfare.																															
<b>ARCH 362:</b> Analyze regulatory context and creation of pre-design parameters.																															
<b>ARCH 421:</b> Examine basic principles involved in the appropriate application of building envelope systems and associated assemblies relative to building integration and human health safety and welfare.																															
<b>ARCH 462</b> : Compare academic issues or concepts with health safety and welfare.																															

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<i>SC.2 Professional Practice:</i> How the program ensures that students understand professional ethics, the regulatory requirements, the fundamental business processes relevant to architecture practice in the United States, and the forces influencing change in these subjects.																														
ARCH 262: Describe the design development and documentation process.																														
<b>ARCH 362:</b> Evaluate ethical questions, including social, economic and environmental issues in practice.																														
<b>ARCH 462:</b> Formulate the transformation of architectural practice in relation to the future of practice.																														
<b>SC.3 Regulatory Context:</b> How the program ensures that students understand the fundamental principles of life safety, land use, and current laws and regulations that apply to buildings and sites in the United States, and the evaluative process architects use to comply with those laws and regulations as part of a project.																														
<b>ARCH 101</b> : Cite and diagram codes, regulations, and evaluative process that address accessibility in buildings and on sites.																														
<b>ARCH 201</b> : Cite and diagram codes, regulations, and evaluative processes that address zoning in buildings and on sites.																														
ARCH 262: Creating technically precise drawings, review specifications and evaluate through regulatory context.																														
ARCH 301: Cite and diagram codes, regulations, and evaluative processes that address life safety in buildings and on sites.																											 	$ \parallel $		
<b>ARCH 362</b> : Analyze regulatory context and creation of pre-design parameters.																														

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June 2020	Studio One	Studio Two	Studio Three	Studio Four	Studio Five	Studio Six	Studio Seven	Studio Eight	Studio Nine	studio Nine	Studio Ten	Criticism One: World Arch & Urb 1	Criticism Two: World Arch & Urb 2	Criticism Three: Architectural Theory	Criticism Four: Contemporary Issues	Criticism Five: Degree Project Research	Building One: Intro to Mat & Meth	Building Two: Intro to Structures	Building Three: Advanced Structures	Building Four: Intro to Systems Int	Building Five: Advanced Systems Int	Building Six: Advanced Mat & Meth	Professional Practice 1	Professional Practice 2	Professional Practice 3	Career Services - IPAL / Work Exp / Career Fa	Public Programming - Lectures / Exhibitions	Student Organizations - AIAS / NOMA / CLEA	Institutes - ACE / Shulman	Yearly Themes - Housing / Climate / Water	New Programs - ACS / Sustainable Practices
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<b>ARCH 401:</b> Cite and diagram life-safety standards, accessibility standards, and other codes and regulations relevant to an architectural project.										•					.,						•										
ARCH 462: Formulate an ethical path that can be translated into practice.																															
<b>SC.4 Technical Knowledge:</b> How the program ensures that students understand the established and emerging systems, technologies, and assemblies of building construction, and the methods and criteria architects use to assess those technologies against the design, economics, and performance objectives of projects.																															
<b>ARCH 102:</b> Identify and diagram building construction and assembly processes including materials, components, and building processes that address issues of sustainability and the methods and criteria used to asses those technologies against the design, economics and performance objectives of projects.																															
<b>ARCH 202:</b> Identify and diagram building service systems including mechanical, plumbing, electric, and circulatory systems with an emphasis on issues of sustainability and the methods and criteria used to asses those technologies against the design, economics and performance objectives of projects.																															
<b>ARCH 321:</b> Identify technologies and process of reviewing basic principles of structural behavior.																															

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<b>ARCH 302:</b> Identify and diagram building envelope systems including materials, moisture barriers, energy performance and to identify and diagram structural systems including gravity, seismic, lateral forces and the methods and criteria used to asses those technologies against the design, economics, and performance objectives.																														1
ARCH 322: Examine types of structural systems through technological influences.																														
<b>ARCH 401:</b> Cite and diagram building construction and assembly process, building service systems, building envelope systems, and building structural systems and the methods and criteria used to asses those technologies against the design, economics, and performance objectives of projects.																														
<b>ARCH 421:</b> Analyze environmental systems' design principles such as embodied energy, active and passive heating and cooling, indoor air quality, solar orientation, day lighting and artificial illumination, and acoustics; including the use of appropriate performance assessment tools.																														
ARCH 422: Evaluate building systems' design principles and methods.																														
<b>ARCH 423:</b> Formulate appropriate technologies and assembly systems through outlined research.																														

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<i>SC.5 Design Synthesis:</i> How the program ensures that students develop the ability to make design decisions within architectural projects while demonstrating synthesis of user requirements, regulatory requirements, site conditions, and accessible design, and consideration of the measurable environmental impacts of their design decisions.																															
<b>ARCH 101:</b> Design buildings and sites within the regulatory framework that governs accessibility.																															
<b>ARCH 201:</b> Design buildings and sites within the regulatory framework that governs zoning.																															
<b>ARCH 301:</b> Design buildings and sites within the regulatory framework that governs life safety.																															
<b>ARCH 401:</b> Design buildings and sites within the regulatory framework that governs life-safety standards, accessibility, and zoning.																															
<b>ARCH 421:</b> Examine principles utilized in the appropriate selection of construction materials, products, components, and assemblies, based on their inherent characteristics and performance, including their environmental impact and reuse.																															
<b>ARCH 422:</b> Formulate appropriate selection of construction materials, products, components, and assemblies, towards design synthesis.																															

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	Studio One	Studio Two	Studio Three	Studio Four	Studio Five	Studio Six	Studio Seven	Studio Eight	Studio Nine	Studio Ten	Criticism One: World Arch & Urb 1	Criticism Two: World Arch & Urb 2	Criticism Three: Architectural Theory	Criticism Four: Contemporary Issues	Criticism Five: Degree Project Research	Building One: Intro to Mat & Meth	Building Two: Intro to Structures	Building Three: Advanced Structures	Building Four: Intro to Systems Int	Building Five: Advanced Systems Int	Building Six: Advanced Mat & Meth	Professional Practice 1	Professional Practice 2	Professional Practice 3	Career Services - IPAL / Work Exp / Career	Public Programming - Lectures / Exhibition	Student Organizations - AIAS / NOMA / CLI	lnstitutes - ACE / Shulman	Yearly Themes - Housing / Climate / Water	New Programs - ACS / Sustainable Practice
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<b>SC.6 Building Integration:</b> How the program ensures that students develop the ability to make design decisions within architectural projects while demonstrating integration of building envelope systems and assemblies, structural systems, environmental control systems, life safety systems, and the measurable outcomes of building performance.																			-											
<b>ARCH 102:</b> Design buildings and sites that integrate building construction and assembly processes including materials, components, and building processes that address issues of sustainability and to measure the performance outcome of those design choices.																														
<b>ARCH 202:</b> Design buildings and sites that integrate service systems including mechanical, plumbing, electric, and circulatory systems with an emphasis on issues of sustainability and to measure the performance outcome of those design choices.																														
<b>ARCH 302</b> : Design building envelope systems including materials, moisture barriers, and energy performance and to identify and diagram structural systems including gravity, seismic, lateral forces and the methods and criteria used to asses those technologies against the design, economics, and to measure the performance outcome of those design choices.																														
<b>ARCH 401</b> : Design buildings and sites that integrate construction and assembly process, building service systems, building envelope systems, and building structural systems and to measure the performance outcome of those design choices.																														

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<b>ARCH 421:</b> Examine basic principles involved in the appropriate application of building envelope systems and associated assemblies relative to building integration.															-					-										
<b>ARCH 422:</b> Assemble basic principles involved in the appropriate application of building envelope systems and associated assemblies relative to building integration.																														

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NAAB PC Program Criteria			_,	_,	_;			_,	_,	-7			_;	-7	-7	_,	- 7	_,	_,	Ū					
<b>PC.1 Career Paths:</b> How the program ensures that students understand the paths to																									
becoming licensed as an architect in the United States and the range of available career																									
onnortunities that utilize the discipline's skills and knowledge																									
APCH 620: Evamine fundamental definition of the professional role of a licensed architect		-																					_		
and the licensing process																									
<b>ARCH 620:</b> Evaluate different models of practice in relation to career evaluation and the																									
future of practice																									
<b>PC 2 Design:</b> How the program instills in students the role of the design process in shaning																									
the hull environment and conveys the methods by which design processes integrate multiple																									
factors, in different settings and scales of development, from huildings to sities																									
ARCH 583: Illustrate the inter-relationship between architectural media, three dimensional																									
form and two dimensional geometry																									
ADCU FRA: Identify and extense testanic alements according to extensional principles																									
ARCH 584: Identify and arrange tectonic elements according to organizational principles.			L																						
ARCH 554 and 620: Identify architects' leadership roles in the design process including the																									
selection and coordination of allied disciplines, post-occupancy evaluation, and facility																									
ARCH 587: Identify, catalog, and respond to an urban context and site conditions.										_															
ARCH 556: Examine and debate principles present in relevant precedents.																									
ARCH 589: Demonstrate the relationship between schematic design, design development,																									
and construction documents in the development of a design proposal.		1																							
ARCH 5759 and 691: Define a scope of inquiry and evaluate outcomes.																									
ARCH 692: Define a working method that integrates formal, spatial, and tectonic elements;																									
that responds to geographic context; and that embodies conceptual frameworks.																									

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June 2020	Graduate Studio One	Graduate Studio Two	Graduate Studio Three	Graduate Studio Four	Graduate Fieldwork Studio	Graduate Studio Five	Graduate Thesis Studio	Criticism 1: Architectural History 1	Criticism 2: Architectural History 2	Criticism 3: Architecture Theory (Mod to Conter	Criticism 4: Research Salon and Thesis Preparati	Building 1: Matter & Making	Building 2: Structural Concepts	Building 3: Advanced Structures	Building 4: Environmental Systems Integration	Visualization 1: Making Technique	Visualization 2: Analytical Constructions	Visualization 3: Advanced Drawing and Modelir	Visualization 4: Evolving Media	Practice 1: Architecture Professionalism	Career Services - IPAL / Work Exp / Career Fair	Public Programming - Lectures / Exhibitions	Student Organizations - AIAS / NOMA / CLEA	nstitutes - ACE / Shulman	Yearly Themes - Housing / Climate / Water	New Programs - ACS / Sustainable Practices
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	583	584	587	589	575	691	692	554	555	556	648	544	545	546	547	562	263	564	565	620						
<b>PC.3 Ecological Knowledge and Responsibility:</b> How the program instills in students a	<u> </u>										_				_,					—	-		-			
holistic understanding of the dynamic between built and natural environments, enabling																										
future architects to mitigate climate change responsibly by leveraging ecological, advanced																										
building performance, adaptation, and resilience principles in their work and advocacy																										
activities.																										
ARCH 544: Compose architectural elements that optimize, conserve, or reuse resources,																										
provide healthful environments for occupants/users, and reduce the environmental impacts																										
of building construction and maintenance.																			$ \rightarrow $							
ARCH 554: Evaluation of basic ecological principles and architects' responsibilities with																										
respect to environmental and resource conservation in architecture and urban design																										
ARCH 587: Understanding the impact of urban and site development on climate justice.																										
ARCH 556: Appraisal of local, regional, national and global settings in relation to their																										-
climatic, ecological, technological, and cultural factors.																										
ARCH 546: Appraise structure and building performance towards responsible ecological			<u> </u>	<u> </u>															$ \rightarrow $	$ \longrightarrow $	$ \longrightarrow $			$\square$	$\perp$	
ARCH 5759: Identify and respond to issue of climate justice in building proposals.																									$\perp$	
ARCH 547: Arrange basic principles involved in the appropriate application of building																										
envelope systems and associated assemblies relative to sustainable and ethical issues.				1		1																		1		

MArch Curriculum Map June 2020	duate Studio One	duate Studio Two	duate Studio Three	duate Studio Four	duate Fieldwork Studio	duate Studio Five	duate Thesis Studio	cism 1: Architectural History 1	cism 2: Architectural History 2	cism 3: Architecture Theory (Mod to Contemp)	cism 4: Research Salon and Thesis Preparation	ding 1: Matter & Making	ding 2: Structural Concepts	ding 3: Advanced Structures	ding 4: Environmental Systems Integration	alization 1: Making Technique	alization 2: Analytical Constructions	alization 3: Advanced Drawing and Modeling	alization 4: Evolving Media	tice 1: Architecture Professionalism:	er Services - IPAL / Work Exp / Career Fair	lic Programming - Lectures / Exhibitions	lent Organizations - AIAS / NOMA / CLEA	itutes - ACE / Shulman	rly Themes - Housing / Climate / Water	<pre>/ Programs - ACS / Sustainable Practices</pre>
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	583	584	587	589	5759	691	692	554	555	556	648	544	545	546	547	562	563	564	565	620						
<b>PC.4 History and Theory:</b> How the program ensures that students understand the histories and theories of architecture and urbanism, framed by diverse social, cultural, economic, and political forces, nationally and globally.																										
<b>ARCH 554:</b> Describe and discuss traditions of architecture, landscape and urban design including examples of indigenous, vernacular, local, regional, national and global settings in terms of their climatic, ecological, technological, socioeconomic, public health, and cultural factors.																										
<b>ARCH 555</b> : Write and discuss traditions of architecture, landscape and urban design including examples of indigenous, vernacular, local, regional, national and global settings in terms of their climatic, ecological, technological, socioeconomic, public health, and cultural factors.																										
ARCH 556: Examine canons and traditions of architecture, landscape and urban design. ARCH 556: Formulate an architectural position in relationship to the histories and theories that shape architectural discourse.																								+	+	
<b>PC.5 Research and Innovation:</b> How the program prepares students to engage and participate in architectural research to test and evaluate innovations in the field.																										
ARCH 562: Examine and expand the conventions of architectural representation. ARCH 563: Formulate representational techniques.																								=		
ARCH 565: Develop representation and thous and evaluate their outcomes.				+	+			+						_									$\rightarrow$		-	

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June 2020	Graduate Studio One	Graduate Studio Two	Graduate Studio Three	Graduate Studio Four	Graduate Fieldwork Studio	Graduate Studio Five	Graduate Thesis Studio	Criticism 1: Architectural History 1	Criticism 2: Architectural History 2	Criticism 3: Architecture Theory (Mod to Conter	Criticism 4: Research Salon and Thesis Preparati	Building 1: Matter & Making	Building 2: Structural Concepts	Building 3: Advanced Structures	Building 4: Environmental Systems Integration	Visualization 1: Making Technique	Visualization 2: Analytical Constructions	Visualization 3: Advanced Drawing and Modelin	Visualization 4: Evolving Media	Practice 1: Architecture Professionalism	Career Services - IPAL / Work Exp / Career Fair	Public Programming - Lectures / Exhibitions	Student Organizations - AIAS / NOMA / CLEA	Institutes - ACE / Shulman	Yearly Themes - Housing / Climate / Water New Programs - ACS / Sustainable Practices
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<b>PC.6 Leadership and Collaboration:</b> How the program ensures that students understand																									
approaches to leadership in multidisciplinary teams, diverse stakeholder constituents, and																									
dynamic physical and social contexts, and learn how to apply effective collaboration skills to																									
ARCH 620: Examine interdisciplinary collaboration to meet project goals																					$ \rightarrow $	$\square$		$ \rightarrow $	
ARCH 5759: Compose collaboration on a creative project, incorporating individual goals and a	1																								
broader purpose. Communicate project ideas to design team.																									_
<b>PC.7 Learning and Teaching Culture:</b> How the program fosters and ensures a positive and																									
respectful environment that encourages optimism, respect, sharing, engagement, and																									
innovation among its faculty, students, administration, and staff.																									
ARCH 583: Discuss ideas and methods in desk crits and pin-ups.																									
ARCH 584: Engage in class discussions and reviews.																			$\rightarrow$	$\rightarrow$					
ARCH 5759: Participate in group activities.																									
ARCH 587 and 691: Present, discuss, and debate work in a public forum.																			$ \rightarrow $					$\rightarrow$	
<b>ARCH 692:</b> Discuss and debate personal work and the work of peers in a respectful manner.																									
Process feedback of others in the development of work.					1																				

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June 2020	Graduate Studio One	Graduate Studio Two	Graduate Studio Three	Graduate Studio Four	Graduate Fieldwork Studio	Graduate Studio Five	Graduate Thesis Studio	Criticism 1: Architectural History 1	Criticism 2: Architectural History 2	Criticism 3: Architecture Theory (Mod to Contem	Criticism 4: Research Salon and Thesis Preparatic	Building 1: Matter & Making	Building 2: Structural Concepts	Building 3: Advanced Structures	Building 4: Environmental Systems Integration	Visualization 1: Making Technique	Visualization 2: Analytical Constructions	Visualization 3: Advanced Drawing and Modeling	Visualization 4: Evolving Media	Practice 1: Architecture Professionalism	Career Services - IPAL / Work Exp / Career Fair	Public Programming - Lectures / Exhibitions	Student Organizations - AIAS / NOMA / CLEA	Institutes - ACE / Shulman	Yearly Themes - Housing / Climate / Water	New Programs - Acs / Sustainable Practices
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<b>PC.8 Social Equity and Inclusion:</b> How the program furthers and deepens students'																										
understanding of diverse cultural and social contexts and helps them translate that																										
understanding into built environments that equitably support and include people of different																										
ARCH 554: Illustrate research of the ethical issues involved in the formation of professional																										
judgment regarding social, political and cultural issues in architectural design and practice.																										
ARCH 620: Identify and discuss ethical issues in architectural design and practice.																										
ARCH 555: Examine ethical issues involved in the formation of professional judgment																										_
regarding social, political and cultural issues in architectural design and practice.																										
ARCH 584: Identify a range of community stakeholders with diverse physical and mental																										
abilities and to translate that understanding into the built environment.																										
<b>ARCH 556</b> : Debate the discipline's responsibility to work in the public interest, to respect																										
historic resources, and to improve the quality of life for local and global neighbors.					1																					

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NAAB SC Student Criteria																										
SC.1 Health, Safety, and Welfare in the Built Environment: How the program ensures that																										
students understand the impact of the built environment on human health, safety, and																										
welfare at multiple scales, from buildings to cities.																										
ARCH 691: Recognize basic principles of health, safety and welfare utilized in the appropriate																										
selection of construction materials, products, components, and assemblies.																		$\vdash$	$\rightarrow$		┝──┤	$\left  - \right $	┝──┤	$\rightarrow$		
accessibility and wellness.																										
ARCH 545: Explain fundamental process of structural system analysis in relation to Heath,																										
Safety and Welfare.	-																	$\square$			$\vdash$		<u> </u>			
ARCH 620: Analyze regulatory context and creation of pre-design parameters.	_																	$\square$	_		$\vdash$		├──┤			
ARCH 547: Examine basic principles involved in the appropriate application of building																										
health safety and welfare.																										
<b>SC.2 Professional Practice:</b> How the program ensures that students understand professional																										
ethics, the regulatory requirements, the fundamental business processes relevant to																										
architecture practice in the United States, and the forces influencing change in these																										
subjects.																		┢──┥								
ARCH 620: Describe the design development and documentation process.																								<b> </b>		
<b>ARCH 620:</b> Evaluate ethical questions, including social, economic and environmental issues in practice.																										
<b>ARCH 5759:</b> Formulate the transformation of architectural practice in relation to the future of practice.																										

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SC.3 Regulatory Context: How the program ensures that students understand the							-				-									_					
fundamental principles of life safety, land use, and current laws and regulations that apply																									
to buildings and sites in the United States, and the evaluative process architects use to																									
comply with those laws and regulations as part of a project.																									
ARCH 583: Cite and diagram codes, regulations, and evaluative process that address																									
accessibility in buildings and on sites.																									
ARCH 587: Cite and diagram codes, regulations, and evaluative processes that address zoning																									
in buildings and on sites.																									
<b>ARCH 547:</b> Creating technically precise drawings, review specifications and evaluate through																									
regulatory context.	_																								_
ARCH 691: Analyze regulatory context and creation of pre-design parameters.	<u> </u>																					-+	$\rightarrow$		
ARCH 589: Cite and diagram life-safety standards, accessibility standards, and other codes																									
and regulations relevant to an architectural project.		1																							

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SC.4 Technical Knowledge: How the program ensures that students understand the																									-
established and emerging systems, technologies, and assemblies of building construction,																									
and the methods and criteria architects use to assess those technologies against the																									
design, economics, and performance objectives of projects.																									
ARCH 584 and 544: Identify and diagram building construction and assembly processes																									
including materials, components, and building processes that address issues of sustainability																									
and the methods and criteria used to asses those technologies against the design, economics																									
and performance objectives of projects.																									
<b>ARCH 547:</b> Identify and diagram building service systems including mechanical, plumbing,																									
electric, and circulatory systems with an emphasis on issues of sustainability and the methods																									
and criteria used to asses those technologies against the design, economics and performance																									
objectives of projects.																									
ARCH 545: Identify technologies and process of reviewing basic principles of structural																									
behavior.	_																								
ARCH 546: Examine types of structural systems through technological influences.	_																								
ARCH 589: Cite and diagram building construction and assembly process, building service																									
systems, building envelope systems, and building structural systems and the methods and																									
criteria used to asses those technologies against the design, economics, and performance																									
objectives of projects.					-																		-		_
ARCH 547: Analyze environmental systems' design principles such as embodied energy, active																									
and passive heating and cooling, indoor air quality, solar orientation, day lighting and artificial																									
illumination, and acoustics; including the use of appropriate performance assessment tools.																									

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<b>SC.5 Design Synthesis:</b> How the program ensures that students develop the ability to make design decisions within architectural projects while demonstrating synthesis of user requirements, regulatory requirements, site conditions, and accessible design, and consideration of the measurable environmental impacts of their design decisions.																										
<b>ARCH 583:</b> Design buildings and sites within the regulatory framework that governs accessibility.																										
ARCH 587: Design buildings and sites within the regulatory framework that governs zoning.																										
<b>ARCH 589:</b> Design buildings and sites within the regulatory framework that governs life-safety standards, accessibility, and zoning.	1			_																						
<b>ARCH 547:</b> Examine principles utilized in the appropriate selection of construction materials, products, components, and assemblies, based on their inherent characteristics and performance, including their environmental impact and reuse and formulate a slection of construction matreials, products, components, and assemblies towards design synthesis.																										

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<b>SC.6 Building Integration:</b> How the program ensures that students develop the ability to																									
make design decisions within architectural projects while demonstrating integration of																									
building envelope systems and assemblies, structural systems, environmental control																									
systems, life safety systems, and the measurable outcomes of building performance.																									
ARCH 584: Design buildings and sites that integrate building construction and assembly																									
processes including materials, components, and building processes that address issues of																									
sustainability and to measure the performance outcome of those design choices.																									
<b>ARCH 547:</b> Design buildings and sites that integrate service systems including mechanical,																									
plumbing, electric, and circulatory systems with an emphasis on issues of sustainability and to																									
measure the performance outcome of those design choices.														_	-										
<b>ARCH 589</b> : Design buildings and sites that integrate construction and assembly process,																									
building service systems, building envelope systems, and building structural systems and to																									
measure the performance outcome of those design choices.				_															$\longrightarrow$					$\perp$	
<b>ARCH 547:</b> Examine and assemble basic principles involved in the appropriate application of																									
building envelope systems and associated assemblies relative to building integration		1	1																						

# Syllabi A.4 Technical Documentation (B. Arch)

# Woodbury University School of Architecture **Professional Practice I – Documentation and Codes** ARCH 250

Semester:Spring 2019Time:Monday 9:00 - 11:30AMLocation:Monday – School of Business AUD & Ahmanson Auditorium

Instructors: Mark Owen (<u>mark.owen@woodbury.edu</u>) Robert Kerr (<u>Robert.kerr@woodbury.edu</u>)

Office Hours: By appointment

#### **Catalog Description**

Legal codes and regulations that affect architecture and influence design are reviewed, including a study of energy, accessibility, egress, and life-safety. The development of project documentation based on local codes is studied, with an emphasis on technical documentation, drawing format organization, and outline specifications.

Three-unit Lecture. Prerequisites: ARCH 211, Design Communication 2 and ARCH 183, Design Studio 1B.

#### Learning Outcomes

Upon completion of this course, it is expected that students will be able to:

Technical Documentation: Ability to make technically clear drawings, write outline specifications, and prepare models illustrating and identifying the assembly of materials, systems, and components appropriate for a building design via the application of Revit software.

Accessibility: Ability to design sites, facilities, and systems to provide independent and integrated use by individuals with physical (including mobility), sensory, and cognitive disabilities.

Life Safety: Ability to apply the basic principles of life-safety systems with an emphasis on egress.

Building Materials and Assemblies: Understanding of the basic principles utilized in the appropriate selection of construction materials, products, components, and assemblies, based on their inherent characteristics and performance, including their environmental impact and reuse.

Client Role in Architecture: Understanding of the responsibility of the architect to elicit, understand, and reconcile the needs of the client, owner, user groups, and the public and community domains.

Project Management: Understanding of the methods for competing for commissions, selecting consultants and assembling teams, and recommending project delivery methods.

Practice Management: Understanding of the basic principles of architectural practice management such as financial management and business planning, time management, risk management, mediation and arbitration, and recognizing trends that affect practice.

Leadership: Understanding of the techniques and skills architects use to work collaboratively in the building design and construction process and on environmental, social, and aesthetic issues in their communities.

Legal Responsibilities: Understanding of the architect's responsibility to the public and the client as determined by registration law, building codes and regulations, professional service contracts, zoning and subdivision ordinances, environmental regulation, and historic preservation and accessibility laws.

Ethics and Professional Judgment: Understanding of the ethical issues involved in the formation of professional judgment regarding social, political and cultural issues in architectural design and practice.

#### NAAB Student Performance Criteria Introduced

#### **B.3: Codes and Regulations**

Ability to design sites, facilities and systems consistent with the principles of lifesafety standards, accessibility standards, and other codes and regulations.

#### **B.4: Technical Documentation**

Ability to make technically clear drawings, prepare outline specifications, and construct models illustrating and identifying the assembly of materials, systems, and components appropriate for a building design.

#### **B.10: Financial Considerations**

Understanding of the fundamentals of building costs, which must include project financing methods and feasibility, construction cost estimating, construction scheduling, operational costs, and life-cycle costs.

#### **Course Description**

An introduction to the architect's core technical and regulatory practice, including alternate practice methodologies that expand the traditional role of the architect.

Legal codes and regulations that affect architecture and influence design are reviewed, including a study of energy, accessibility, egress, and life-safety. The development of project documentation based on local codes is studied, with an emphasis on technical documentation, drawing format organization, and outline specifications.

Additionally, within the primary focus of the course, other corollary practices that have the ability of broadening the role of the architect will be reviewed to both prepare for future design studios and alternate career paths. Lecture topics will also include strategic partnering, project delivery strategies, marketing & branding strategies and opportunities, and construction / project management.

#### **Schedule and Deliverables**

Schedule is attached via separate document.

#### **Final Grade Calculation**

Provide a breakdown of how final grades will be calculated.

#### Assignments and Assessment

Attached to the schedule are point values and percentages of course assignments and class expectations. The points are broken into 3 categories:

- Class participation and assignments
- ADA Project
- Final Project

Class participation points vary depending on the expectations of each assignment. For typical assignments, students fulfill a set of criteria handed out prior to the presentation.

#### Levels of accomplishment

-Understanding: Have the capacity to classify, compare, summarize, explain and/or interpret information. Students can correctly paraphrase or summarize information without necessarily being able to relate it to other material or see its fullest implications.

-*Ability:* proficiency in using specific information to accomplish a task, correctly selecting the appropriate information, and accurately applying it to the solution of a specific problem, while also distinguishing the effects of its implementation.

#### **NAAB Criteria Satisfied**

A 4	Technical Decumentation	a bility
A.4	rechnical Documentation	ability
B.2	Accessibility	ability
B.5	Life Safety	ability
C.1	Collaboration	ability
C.2	Human Behavior	ability
C.3	Client Role in Architecture	understanding
C.4	Project Management	understanding
C.5	Practice Management	understanding
C.6	Leadership	understanding
C.7	Legal Responsibility	understanding
C.8	Ethics and Professional Judgment	understanding

School of Architecture Tracks of Mastery

Critical Thinking	practiced: Background
Design	practiced: Background
Building	practiced
Representation	practiced: High Importance
Professionalism	practiced: High Importance
	Critical Thinking Design Building Representation Professionalism

#### Estimate of Costs

Additional costs will be limited to occasional printing of materials for review by the instructors. No other costs should be incurred by students.

#### **Attendance Policy**

When over 15% of the class time has been missed a student's absence rate is considered excessive. Any student having unexcused absences more than 15% of the class time will receive one full letter grade deduction from their overall earned grade. For every subsequent unexcused absence an additional full letter grade reduction will apply to their final earned grade. Two late arrivals (of more than 15 minutes) will be considered as one unexcused absence. Students not present at the end of the class will be counted as absent.

Grades will be given for each assignment, test, or project on and only on the day it is due and cannot be remediated. The grade for a missing assignment, test, or project will be a "0". It is advisable to turn-in incomplete work rather than present nothing at all or be absent.

Even with excused absences it is up to the instructor to determine whether the amount of time missed by a student prohibits them from passing a class. Excessive excused or unexcused absences prohibit a student's understanding, retention and completion of the course work. See Woodbury's catalogue for justified incomplete and final withdrawal dates for the semester.

Final course grades may not be changed as a result of students' submitting additional work, repeating examinations, or taking additional examinations after the conclusion of the course. See the University catalog for Policy on Incomplete Grades; there will be no exceptions.

There will be a zero tolerance policy towards disruptive behavior. Students' behavior that obstructs or disrupts the campus educational process (including personal discussions during critiques or presentations, or working on other classes during studio time) will be asked to leave the class and will be considered absent for the session without excuse.

See attached Policy on Academic Honesty. Unless specifically assigned, group or team efforts on individual solutions or projects will be considered to have violated academic honesty and appropriate disciplinary action will be taken which may include refusal of course credit, probation, suspension, or expulsion.

#### SPECIAL NEEDS ACCOMMODATIONS

Woodbury University is committed to making reasonable accommodations to assist individuals with disabilities in reaching their academic potential. Students desiring accommodations due to a physical, learning or psychological disability must first complete an *Accommodations Request Form*, which can be downloaded from<u>http://go.woodbury.edu, and found under</u> "Academic Resources." Accommodations cannot be granted prior to the instructor's receipt of a *Notification of Special Needs Release Form* from the Disabilities Coordinator. Accommodations are never provided retroactively. (For more information, contact the Disabilities Coordinator in the Whitten Center (818) 394-3345.)

#### Moodle Policy

Assignments and all lectures will be posted on Moodle prior to class for review in preparation for each class.

#### DEPARTMENT POLICIES AND PROCEDURES

#### **Requirements for Documentation and Archiving**

Each student must submit documentation of the full semester's work at the end of each term, in pdf format. Materials should include research, writing, and design work, including important study models and sketches. Studio faculty will further define how this work should be organized and presented before the end of the semester. Failure to submit the required documentation in usable format may result in a grade reduction in the final grade of the semester. Documentation of the studio work is essential for the NAAB accreditation process and assessment of the architecture program.

The university reserves the right to retain student work for archival purposes. Projects/models, assignments, and exams will be kept at the department's discretion for this purpose. Students will be asked to help with archiving their projects at the end of the semester.

#### Writing Requirements

All written work must meet the standards for English. Poorly written papers may be returned without a grade for revision and resubmission, and may be subject to grade reduction. Students are encouraged to utilize the Woodbury Writing Center. Link is <u>here</u>.

#### Studio Culture

The studio environment is an essential component in learning to become an architect. One goal of the School of Architecture is to create a vibrant, exploratory, safe and respectful learning culture for students. Only through respect between faculty and students, as well as students among themselves, can a healthy educational studio culture be fostered. Students are required to uphold high standards of behavior and academic discipline while in the studio. See the full Studio Guidelines and Studio Culture Policy for more information.

#### School Policy on Social Equity and Diversity

Our mission is to provide an environment where people can learn, teach and work with a shared sense of purpose, core values and respect without bias towards individual beliefs, values and areas of difference. We do this in an effort to create a community that respects and values the full and equal inclusion of its members. Our goal is to provide an environment that is welcoming and inclusive of all.

#### Universal Pedagogy

Woodbury University is committed to making reasonable accommodations to assist individuals with disabilities in reaching their academic potential. Students desiring accommodations due to a physical, learning or psychological disability must first complete an Accommodations Request Form, which can be downloaded <u>here</u>, and found under "Academic Resources." Accommodations cannot be granted prior to the instructor's receipt of a Notification of Special Needs Release Form from the Disabilities Coordinator. Accommodations are never provided retroactively. (For more information, contact the Disabilities Coordinator (818) 394-3345.)

#### Academic Honesty

Students are responsible for familiarizing themselves with Woodbury's Student Code of Conduct, which can be found in the Catalog. Academic misconduct, dishonesty, plagiarism, and cheating will not be tolerated and may lead to failure of the course.

#### **Grade Requirements**

Refer to the Woodbury University catalog for grading standards and policies.

#### **Environmental Responsibility**

Studio projects shall be designed in a socially and environmentally responsible manner. All projects should reduce dependencies on non-renewable resources.

#### **Class Attendance**

It is mandatory that students take advantage of all scheduled course time. Regular attendance at EVERY class is expected throughout the duration of the class/studio time. Arrival at the beginning of the class period is required. Lateness or early departure will be considered as an absence. 'Regular and prompt attendance at all university classes is required. The instructor is not obligated to assign extra work or to prepare additional examinations for classes missed. It is understood that when 15% of the class time has been missed, the student's absence rate is excessive. Each instructor will announce his/her attendance policy in the course syllabus.

#### **Excused Absence**

Students should report any illness or emergency to their course instructor, preferably before missing the class, by emailing the instructor. Written documentation (doctor's note, etc.) is required for an excused absence, and should be submitted to the instructor at the next class meeting. Extended absence due to medical issues, family issues, etc. should be reported to the Dean of Students' office for appropriate documentation.

Students who anticipate absence due to religious observance or similar commitments should speak with their instructor at the start of the term to review all dates in question and develop a plan to meet all course requirements.

#### Email

Students are advised to meet with their instructors during posted office hours. Face-to-face communication in discussing and resolving problems is preferable to email exchanges. Additionally, meetings must be scheduled in advance using email correspondence. Email correspondence must be written in a respectful and professional manner. It is the student's responsibility to consistently check for email.

#### **Grievance Protocol**

Students should use the following protocol for questions, grievances, or general concerns about coursework and the studio environment. Health and safety concerns and emergencies should immediately be directed to campus security (818-252-5208). Academic concerns should be directed first to the student's instructor, and then to the studio coordinator as appropriate. If further consultation is required, the student is advised to meet with the Undergraduate or Graduate Chair.

#### **Class Syllabus and Structure**

While every effort will be made to follow the outline of the published syllabus, course structure and calendar may be changed at the instructor or coordinator's discretion. Announcements will be made if such changes occur. Students who miss class are responsible for tracking any such announcements.
### Calculation Of Grade

Letter grades are converted to numeric values using the following values:

Letter	GPA	%	Definition
А	4.00-3.84	96-100	Student learning and accomplishment far exceeds published objectives for the course/test/assignment and student work is distinguished consistently by is high level of competency and/or innovation.
A-	3.83-3.50	92-95	
B+	3.49-3.17	88-91	Student learning and accomplishment goes beyond what is expected in the published objectives for the course/test/assignment and student work is frequently characterized by its special depth of understanding, development, and/or innovative experimentation.
В	3.16-2.84	84-87	
В-	2.83-2.50	80-83	Students learning and accomplishment meets all published objectives for the course/test/assignment and the student work demonstrates the expected level of understanding, and application of concepts introduced.
C+	2.49-2.17	76-79	
С	2.16-1.84	72-75	
C-	1.83-1.50	68-71	Student learning and accomplishment based on the published objectives for the course/test/assignment were met with minimum passing achievement.
D+	1.49-1.17	64-67	
D	1.16-0.60	60-63	
F	0.00-0.60	< 60	Student learning and accomplishment based on the published objectives for the course/test/assignment were not sufficiently addressed nor met.

# Woodbury University School of Architecture **Studio 7** ARCH 401

Semester:Fall 2020Time:Tuesday / Friday 1:15-6:15 pmLocation:online and Julius Shulman Building JS106Instructors:Matthew Gillis, Stephen Marshall, Eric Olsen, Linda TaalmanOffice Hours:e-mail instructor for appointment

### **Catalog Description**

Students produce a comprehensive architectural project based upon a building program and site that includes the development of programmed space, demonstrating an understanding of structural and environmental systems, life-safety provisions, wall sections, building assemblies, and the principles of sustainability. The studio is open to fourth- and fifth-year students. The last half of the semester is devoted to design development. Studio. Prerequisite: ARCH 302, Studio Six. Co-requisite: ARCH 421, Building Four: Introduction to Systems Integration.

Six Unit Studio.

### Learning Outcomes

Minimum to NAAB Criteria:

PC.2: Design: How the program instills in students the role of the design process in shaping the built environment and conveys the methods by which design processes integrate multiple factors, in different settings and scales of development, from buildings to cities.

Learning Outcome: Demonstrate the relationship between schematic design, design development, and construction documents in the development of a design proposal.

PC.3: Ecological Knowledge and Responsibility: How the program instills in students a holistic understanding of the dynamic between built and natural environments, enabling future architects to mitigate climate change responsibly by leveraging ecological, advanced building performance, adaptation, and resilience principles in their work and advocacy activities.

Learning Outcome: Identify and respond to issue of climate justice in building proposals.

PC.7: Learning and Teaching Culture: How the program fosters and ensures a positive and respectful environment that encourages optimism, respect, sharing, engagement, and innovation among its faculty, students, administration, and staff.

Learning Outcome: Present, discuss, and debate work in a public forum.

SC.3 Regulatory Context: How the program ensures that students understand the fundamental principles of life safety, land use, and current laws and regulations that apply to buildings and sites in the United States, and the evaluative process architects use to comply with those laws and regulations as part of a project.

Learning Outcome: Cite and diagram life-safety standards, accessibility standards, and other codes and regulations relevant to an architectural project.

SC.4 Technical Knowledge: How the program ensures that students understand the established and emerging systems, technologies, and assemblies of building construction, and the methods and criteria architects use to assess those technologies against the design, economics, and performance objectives of projects.

Learning Outcome: Cite and diagram building construction and assembly process, building service systems, building envelope systems, and building structural systems and the methods and criteria used to asses those technologies against the design, economics, and performance objectives of projects.

SC.5 Design Synthesis: How the program ensures that students develop the ability to make design decisions within architectural projects while demonstrating synthesis of user requirements, regulatory requirements, site conditions, and accessible design, and consideration of the measurable environmental impacts of their design decisions.

Learning Outcome: Design buildings and sites within the regulatory framework that governs life-safety standards, accessibility, and zoning.

SC.6 Building Integration: How the program ensures that students develop the ability to make design decisions within architectural projects while demonstrating integration of building envelope systems and assemblies, structural systems, environmental control systems, life safety systems, and the measurable outcomes of building performance.

Learning Outcome: Design buildings and sites that integrate construction and assembly process, building service systems, building envelope systems, and building structural systems and to measure the performance outcome of those design choices.

Upon completion of this course, it is expected that students will be able to:

- Develop a comprehensive design proposal, integrating clear formal and spatial architectural solutions that respond to site and climate, accessibility, and present a fully integrated approach to systems
- Emphasize the design of an architecture through assemblies of materials and systems
- Make connections between building composition, assembly, manufacturing, fabrication and representation
- Design a construct fully articulate of human activity and code compliance, of component parts and whole, and human control and resource management
- Integrate the multitude of systems into the proposed architecture required today to create sustainable building solutions

### **Course Description**

This year's Comprehensive Studio 7 will focus on the dilemma we are currently facing, during a time of pandemic, within the space of schools, specifically primary school; and on finding creative architectural solutions for educational facilities that both bring technological solutions to creating healthy learning environments and expand the framework of the traditional classroom by creating enhanced indoor/outdoor, open and active learning environments.

We are in an unprecedented moment, and one of the essential elements of our functioning society is the school, which provides education for the next generation but also provides the essential services of basic meals and nourishment (National School Lunch Program and School Breakfast Program) providing 1M meals per day for these students and basic child care so that the parents can go to work. In the past 6 months LAUSD has functioned as a food bank (at the cost of \$2M/day)¹ for the children and communities they serve. It cannot be understated how essential these services are that school's provide for societies functioning.

In the past 6 months we have directly seen how behaviors can be modified to change our interaction with each other and how technology can increase our ability to communicate and work remotely. However, for young children the expectation that zoom can replace the in-person activities of learning has proved difficult, and the classroom model we currently have does not work for the CDC guidelines for gathering in social spaces. There is an opportunity to rethink today's classroom and school facilities to enable smaller learning pods and more open learning spaces, and the use of the larger environment and the outdoors as an alternative to the traditional classroom.

The comprehensive framework of the studio will ask each student to develop detailed architectural solutions for an early education learning environment.

Each studio will take on a specific site and approach to this essential civic institution.

Studio 7 is the Comprehensive Design Studio, in which students will develop a complex architectural project to a design development level that culminates in a highly detailed documentation of their design. Each project is expected to incorporate the essential aspects of design – site, circulation, structural and environmental systems with more detailed and integrated design decisions in terms of building envelope, building material and building service systems. The framework of the studio is rigorous in its effort to guide the student to this advanced level of development and the pace of the studio rapidly progresses from conceptualization to design development. Students' projects are expected to incorporate a technical level of detail and understanding, from local codes and regulations including ADA and life safety, to conventions of architectural documentation, including detailed drawings and specifications. The studio will make use of multiple methodologies of design in the visualization and development of the projects, incorporating projective and axonometric drawings, physical and digital modeling, and graphic representations.

Studio 7 is developed in tandem with the Building 4: Intro to Systems Integration course and together they integrate the tools and knowledge necessary to develop a fully integrative Comprehensive Design project. Through lectures, in-class critiques and consultant round tables the studio and seminar will introduce the students to a spectrum of design and engineering professionals, giving students the opportunity to have direct feedback on their design projects.

### Schedule and Deliverables

Schedule and deliverables subject to change. September 8- Design Research presentation (Assignment 1) September 22- Concept Design presentation (Assignment 2) October 13- Systems Design presentation (Assignment 3)

¹ Blume, Howard, LA Times, *27, 525 pounds of carrots a day: How LA Schools are feeding the masses,* April 19, 2020

November 20- Building Development and Site Integration presentation (Assignment 4) December 4- Studio Final presentation (incorporates Ass. 1-4 and Final Presentation req.)

### **Final Grade Calculation**

- 20% Design Research
- 20% Concept Design
- 20% Systems Design
- 20% Building Development and Site Integration
- 10% Final Presentation
- 10% Overall development, Attendance and Participation in studio

### Assignments and Assessment

Students will work through a combination of research & development and design in order to develop highly detailed and inventive building systems with a particular focus on innovative building envelope systems. Students will deploy these systems to create a holistic design that proposes sustainable solutions to the built environment. Students will develop detailed drawings and models that they will prototype in 3d digital models, detailed 2d drawings and detailed physical models.

Assignments will follow through 4 phases, Design Research, Concept Design, Systems Design and Building Development and Site Integration. Weekly updates and sub assignments will be given.

### Part 1: DESIGN RESEARCH

Activities and Processes: Research of Precedents, Material Research and Programming through documentation, catalog and interpretation, drawing and digital modeling.

• Students will research the studio topic through a multiprong interpretive lens, critical analysis of precedents, material research, and programmatic research

This assignment consists of 3 key parts

- 1.1. Precedent Research
- 1.2. Material Research
- 1.3. Programmatic Research
- Assessment/grading criteria used to generate grading rubrics.

Criteria below will be used in a matrix that is aligned with each sub assignment

- Precedent Research, Documentation and Interpretation (NAAB PC.2. PC.7)
- Material Research (NAAB PC.2. PC.7)
- Programmatic Research (NAAB PC.2. PC.7)

### Part 2: CONCEPT DESIGN

Activities and Processes: Development of Concept Design through digital modeling, drawing both orthographic and axonometric, and 3d visualization.

Students will conceptually develop their material and program research through the development of the envelope into a proposal that integrates concepts for passive design

This assignment consists of 2 key parts

2.1. Conceptual development of program as a 3-dimensional space integrating the human scale

2.2. Conceptual envelope design and passive design strategies (daylighting, shading, heat gain, natural ventilation)

• Assessment/grading criteria used to generate grading rubrics.

Criteria below will be used in a matrix that is aligned with each sub assignment

- Develops clear Conceptual strategies in response to material and programmatic research (NAAB PC.2. PC.7)
- Conceptual Building Envelope responds appropriately to design criteria, develops clear passive design strategies for massing and orientation (NAAB PC.3)
- Integrative design approach- integration of multiple strategies in the creation of a holistic design (NAAB PC.2. PC.5, PC.7)

## Part 3: BUILDING ENVELOPE AND SYSTEMS DESIGN

Activities and Processes: Development of Systems Design through physical and digital modeling, drawing both orthographic and axonometric, and 3d visualization

• Students will develop their building envelope with consideration of primary active systems required for maintaining comfort and performance and balancing energy loads- active system and primary building service systems. The physical integration of these systems within the building envelope is the main objective.

This assignment consists of 2 key parts

3.1. Development of Building Envelope and integration with structural system

3.2. Integration of Active Systems for environmental control (heating, cooling, ventilation, lighting)

3.3. Integration of Building Service Systems (energy systems, mechanical, electrical, plumbing, life safety, AV/Security)

• Assessment/grading criteria used to generate grading rubrics.

Criteria below will be used in a matrix that is aligned with each sub assignment

- 1) Develops clear strategies for building envelope that successfully integrates the structural system (NAAB PC.2. PC.7)
- 2) Develops strategies for integrating active systems for environmental control with the conceptual design (NAAB PC.2. PC.7, SC.4, SC.6)
- Develops the project through a clear systems design that successfully integrates the primary building service systems with the conceptual building envelope (NAAB PC.2. PC.7, SC.6)
- 4) Clear integrative approach and design decision making (NAAB PC.2. PC.7)
- 5) Integrative design approach- integration of multiple strategies in the creation of a holistic design (NAAB PC.2. PC.7, SC.4, SC.6)

# Part 4: BUILDING DEVELOPMENT AND SITE INTEGRATION

Activities and Processes: Development of Building Design through drawing both orthographic and axonometric, 3d visualization, digital and physical modeling, and detailed drawings

- Students will develop their project into a fully integrated building and site taking into consideration the primary physical and spatial systems of architecture and enclosure along with the dynamic systems of environmental control, energy, water and resource management. The design will be developed as a detailed set of design development drawings.
  - 4.1: Site Integration strategies for integrating the building design
  - 4.2. Networked Systems- strategies for integrating and interconnecting with the larger site
  - 4.3. Dynamic Systems and responsive architecture
  - 4.3. Detailed drawings describing the architectural project, including details and specifications
  - Assessment/grading criteria used to generate grading rubrics.

Criteria below will be used in a matrix that is aligned with each sub assignment

- 1) Develops strategies for responding to dynamic forces of time, season and climate and availability of resources
- 2) Develops the project through clear drawings that describe a developed building design successfully integrating all the systems into an architectural project
- Project successfully demonstrates ability to apply local codes and regulations in the building design and the development of plans, sections and elevations and selection of the appropriate building systems (NAAB PC.2. PC.7, SC.3, SC.5, SC.6)
- 4) Detailed technical documentation of the project through technical drawings, specifications and feasibility projections (NAAB PC.2. PC.7, SC.3, SC.5, SC.6)

Final Presentation will integrate Part 1-4 into a holistic presentation

### **Estimate of Costs**

Students should expect to expend the necessary resources to produce drafts and final for each subpart of the Assignment. Printing costs are dependent on current printing and plotting costs established by the university (please see labs) and specific design solutions and material requirements for modeling materials. Estimated printing and model making costs detailed below.

Printing budget- \$500

### Attendance Policy

Students are expected to attend each session of studio to not miss key assignments, presentations, discussions and critique. It is impossible to make up a studio session- particularly when guests are visiting studio for discussions and critiques or for key presentations. If a presentation is missed the material intended to be presented on that date must be submitted complete to Moodle on the due date, and physically presented at the next class session.

### Submitting Late Work

Late work will be accepted; however, grading will be reduced by 5% if returned within a week and 10% if returned by the end of the semester

### **Moodle Policy**

Assignments will be posted to Moodle; students are expected to download reading materials from Moodle according to the schedule and must be prepared to discuss these materials in class. Students are responsible for posting all assignments to Moodle by the assignment due date.

### Web Cam Usage

Students are expected to use Ring Central, zoom, concept board and other platforms to interact with instructors and their peers digitally using webcam and audio for discussions and presentations. Webcam usage will be required during presentations. If the student is participating in a group discussion and is not presenting, they are able to mute their audio and turn off their web cam for reasons of background noise, bad reception or other personal reasons. However, participation in this course is part of the students' grading and this requires engaging other students and instructors actively.

#### DEPARTMENT POLICIES AND PROCEDURES

Requirements for Documentation and Archiving Each student must submit documentation of the full semester's work at the end of each term, in pdf format. Materials should include research, writing, and design work, including important study models and sketches. Studio faculty will further define how this work should be organized and presented before the end of the semester. Failure to submit the required documentation in usable format may result in a grade reduction in the final grade of the semester. Documentation of the studio work is essential for the NAAB accreditation process and assessment of the architecture program.

The university reserves the right to retain student work for archival purposes. Projects/models, assignments, and exams will be kept at the department's discretion for this purpose. Students will be asked to help with archiving their projects at the end of the semester.

#### Writing Requirements

All written work must meet the standards for English. Poorly written papers may be returned without a grade for revision and resubmission, and may be subject to grade reduction. Students are encouraged to utilize the Woodbury Writing Center. Link is <u>here</u>.

#### Studio Culture

The studio environment is an essential component in learning to become an architect. One goal of the School of Architecture is to create a vibrant, exploratory, safe and respectful learning culture for students. Only through respect between faculty and students, as well as students among themselves, can a healthy educational studio culture be fostered. Students are required to uphold high standards of behavior and academic discipline while in the studio. See the full Studio Guidelines and Studio Culture Policy for more information.

### School Policy on Social Equity and Diversity

Our mission is to provide an environment where people can learn, teach and work with a shared sense of purpose, core values and respect without bias towards individual beliefs, values and areas of difference. We do this in an effort to create a community that respects and values the full and equal inclusion of its members. Our goal is to provide an environment that is welcoming and inclusive of all.

#### Universal Pedagogy

Woodbury University is committed to making reasonable accommodations to assist individuals with disabilities in reaching their academic potential. Students desiring accommodations due to a physical, learning or psychological disability must first complete an Accommodations Request Form, which can be downloaded from http://go.woodbury.edu, and found under "Academic Resources." Accommodations cannot be granted prior to the instructor's receipt of a Notification of Academic Accommodation Plan (NAAP) from the Disabilities Coordinator. Accommodations are never provided retroactively. (For more information, contact the Disabilities Coordinator in the Whitten Center (818) 394-3345.)

#### **Academic Honesty**

Academic integrity is important for two reasons: first, independent and original scholarship ensures that students and scholars derive the most from their educational experience and the pursuit of knowledge. Second, academic dishonesty violates the most fundamental values of a community of scholars and depreciates the achievements of the entire University community. Accordingly, Woodbury University views academic dishonesty as one of the most serious offenses that a member of our community can commit. Adherence to the Academic Honesty Policy reflects the commitment of our community to the ideals of learning, research, and scholarship. See Catalog for the entire Academic Honesty Policy.

#### **Grade Requirements**

Refer to the Woodbury University catalog for grading standards and policies.

#### **Environmental Responsibility**

Studio projects shall be designed in a socially and environmentally responsible manner. All projects should reduce dependencies on non-renewable resources.

#### **Class Attendance**

It is mandatory that students take advantage of all scheduled course time. Regular attendance at EVERY class is expected throughout the duration of the class/studio time. Arrival at the beginning of the class period is required. Lateness or early departure will be considered as an absence. 'Regular and prompt attendance at all university classes is required. The instructor is not obligated to assign extra work or to prepare additional examinations for classes missed. It is understood that when 15% of the class time has been missed, the student's absence rate is excessive. Each instructor will announce his/her attendance policy in the course syllabus.

#### **Excused Absence**

Students should report any illness or emergency to their course instructor, preferably before missing the class, by emailing the instructor. Medical reasons for absences can alternatively be shared with the school nurse and/or the coordinator for the ODAS (disabilities office) who will notify instructor of receipt without revealing specific information.

Students who anticipate absence due to religious observance or similar commitments should speak with their instructor at the start of the term to review all dates in question and develop a plan to meet all course requirements.

#### Email

Students are advised to meet with their instructors during posted office hours. Face-to-face communication in discussing and resolving problems is preferable to email exchanges. Additionally, meetings must be scheduled in advance using email correspondence. Email correspondence must be written in a respectful and professional manner. It is the student's responsibility to consistently check for email. students should use their official woodbury.edu email account.

Due to confidentiality and FERPA requirements all faculty, staff and students, when corresponding through email, must use their university provided Woodbury.edu email accounts. Students are encouraged to check this email address regularly as it is the only email address in which they will receive official course or university information.

#### **Grievance Protocol**

Students should use the following protocol for questions, grievances, or general concerns about coursework and the studio environment. Health and safety concerns and emergencies should immediately be directed to campus security (818-252-5208). Academic concerns should be directed first to the student's instructor, and then to the

studio coordinator as appropriate. If further consultation is required, the student is advised to meet with the Coordinator and/or the Chair (Marc Neveu, both Undergraduate and Graduate).

#### **Class Syllabus and Structure**

While every effort will be made to follow the outline of the published syllabus, course structure and calendar may be changed at the instructor or coordinator's discretion. Announcements will be made if such changes occur. Students who miss class are responsible for tracking any such announcements.

#### ONLINE COURSE DELIVERY POLICIES AND GUIDELINES

#### Formats of delivery:

**Synchronous online:** All instruction is provided via the Internet and no face-to-face instruction is required. Faculty and learners meet for regularly scheduled class sessions.

Synchronous activities provide real-time dialogue that can provide the human interaction that is needed among our Woodbury student population.

**asynchronous online**: All instruction is provided via the Internet and no face-to-face instruction is required. Faculty and learners do not meet for regularly scheduled class sessions.

Asynchronous activities allow students with the flexibility to complete certain course work at their own pace, within reason. It also allows students time to think, write, and reflect.

**hybrid with synchronous online:** An instructional delivery method which combines the traditional delivery and the synchronous_distance delivery formats.

**hybrid with asynchronous online:** An instructional delivery method which combines the traditional delivery and the synchronous_distance delivery formats.

traditional: This delivery method allows learners and faculty to meet in person or as a group for regularly scheduled class sessions either on campus or at another physical location.

#### Type of course:

**Lecture**: Refers to the first or primary organization of non-lab class instruction, e.g., a lecture where instructor-based material is presented, or a seminar where material is analyzed and discussed by both students and instructor. Also includes case studies and team-based learning situations. Class meeting time equals 50 minutes per unit per week.

Studio: Refers to situations where the student is engaged in the practice and use of techniques for productions in the areas of architecture, interior design, graphic design, and other design forms. This instruction is used to further advance student's skills in their field of design. The instructor role varies from direct assistance to simple availability for questions and supervision. Class meeting time equals 100 minutes per unit per week.

Laboratory: Refers to the first organization of laboratory class instruction unless one of the other classifications above is more appropriate. Includes both group instruction and individualized instruction such as biology and physics lessons, supervised computing exercises, and hands-on

activities. Class meeting time equals 50 minutes per unit per week.

#### Length of sessions:

16-week (Fall/Spring) 7-week intensive format (Fall/Spring) 5-week intensive format (Fall/Spring) 10-week (Summer) 6-week (Summer Super Sessions)

#### **Online / Hybrid Requirements**

Students must have basic computer skills, including the use of word processing software, email, and the ability to use internet browsers, such as Safari, Firefox, or Chrome.

All communication by email will be using the assigned woodbury.edu address. Students are required to access this email account on a daily base to ensure timely communication.

Woodbury University's Learning Management System (LMS) of record is Moodle. Moodle should be used to provide students information they need to plan, prepare, and learn in the course. This information includes, but is not limited to: (a) your course syllabus; (b) assignment due dates, instructions, and grading rubrics; (c) course schedule; (d) additional course materials and links, etc.; and/or (e) exams.

Students are responsible for meeting the technical requirements of <u>Moodle</u> and <u>RingCentral</u> and to familiarize themselves with the Moodle Learning Management System and RingCentral Communications System.

IT provides a Moodle (and RingCentral for online delivery) orientation "course" visible to students enrolled in all courses. Students unfamiliar with Moodle are required to review or consult it as needed. This ensures class time is dedicated to course content and not technical tutorials. The syllabus should also indicate how IT will support students' online technical needs.

All required materials, including readings, videos, lectures will be posted on and can be accessed through Moodle.

All assignments have to be submitted through Moodle or <u>OneDrive</u>, depending on file size and faculty instructions.

Exams and quizzes will be administered through either Moodle or <u>Proctorio</u>. Students are required to install the Proctorio Extension in advance.

#### Attendance policy

Regular and prompt attendance at all University classes is required. It is the responsibility of the student to adhere to class/studio participation expectations. The instructor is not obligated to assign extra work or to prepare additional content for material missed. It is understood that when 15% of the class time has been missed, the student's absence rate is excessive. The interpretation of this participation policy is left to the discretion of individual faculty.

Attendance of synchronous classes will be measured through attendance of the RingCentral meetings. Students are required to have their camera turned on for the entire class session to be counted as present. If technical or privacy issues prevent the student from having the camera turned on, then the student must contact the Office of Student Affairs and apply for an exemption. Students must complete an Accommodations Request Form, which can be downloaded from http://go.woodbury.edu, and found under "Academic Resources." Accommodations cannot be granted prior to the instructor's receipt of a Notification of Special Needs Release Form from the Disabilities Coordinator. Accommodations are never provided retroactively.

Attendance of asynchronous classes will be measured through the last access to the course in Moodle, participation in quizzes and online discussions, as well as submitted assignments by the required day and time.

#### Protecting Privacy and Data During Remote Instruction

This class is being conducted over Ring Central and Moodle. As the host, the instructor may be recording the sessions. The recording feature for others is disabled so that no one else will be able to record the sessions. No recording by other means is permitted. The sessions will be posted on the Moodle class website unless otherwise notified. In case of privacy concerns and individual students wanting not to appear in the recording, the student must contact the Office of Student Affairs and apply for an exemption. Students must complete an Accommodations Request Form, which can be downloaded from http://go.woodbury.edu, and found under "Academic Resources." Accommodations cannot be granted prior to the instructor's receipt of a Notification of Special Needs Release Form from the Disabilities Coordinator. Accommodations are never provided retroactively. If the student prefers to use a pseudonym instead of the real name, please let the instructor know what name will be used so that the instructor knows who you the student is during the session.

Pursuant to the terms of the agreement between the vendors (Moodle and RingCentral) and Woodbury University, the data is used solely for this purpose and the vendor is prohibited from re-disclosing this information. Woodbury University also does not use the data for any other purpose. Recordings will be deleted when no longer necessary. However, the recording may become part of an administrative disciplinary record if misconduct occurs during a video conference.

### Calculation Of Grade

Letter grades are converted to numeric values using the following values:

Letter	GPA	%	Definition
А	4.00-3.84	96-100	Student learning and accomplishment far exceeds published objectives for the course/test/assignment and student work is distinguished consistently by is high level of competency and/or innovation.
A-	3.83-3.50	92-95	
B+	3.49-3.17	88-91	Student learning and accomplishment goes beyond what is expected in the published objectives for the course/test/assignment and student work is frequently characterized by its special depth of understanding, development, and/or innovative experimentation.
В	3.16-2.84	84-87	
B-	2.83-2.50	80-83	Students learning and accomplishment meets all published objectives for the course/test/assignment and the student work demonstrates the expected level of understanding, and application of concepts introduced.
C+	2.49-2.17	76-79	
С	2.16-1.84	72-75	
C-	1.83-1.50	68-71	Student learning and accomplishment based on the published objectives for the course/test/assignment were met with minimum passing achievement.
D+	1.49-1.17	64-67	
D	1.16-0.60	60-63	
F	0.00-0.60	< 60	Student learning and accomplishment based on the published objectives for the course/test/assignment were not sufficiently addressed nor met.

# Woodbury University School of Architecture Building 4: Intro to Systems Integration ARCH 421

Semester: Fall 2020

Time: Friday 9:00-11:30 am

Location:

Instructors: Matthew Gillis, Stephen Marshall, Eric Olsen, Linda Taalman

Office Hours: e-mail instructor for appointment

### **Catalog Description**

The interrelationships of the properties of materials, structures, environmental systems, building envelope systems, construction technology, building cost control, and life-cycle costs as they influence design development and decision making are examined. A comprehensive and integrative process is presented. Lecture. Prerequisites: ARCH 122, Building One Introduction to Materials and Methods, ARCH 321, Building Two: Structures I. Co-requisite: ARCH 401, Studio Seven.

Three Unit Lecture.

### Learning Outcomes

Minimum to NAAB Criteria:

SC.1 Health, Safety, and Welfare in the Built Environment: How the program ensures that students understand the impact of the built environment on human health, safety, and welfare at multiple scales, from buildings to cities.

Learning Outcome: Examine basic principles involved in the appropriate application of building envelope systems and associated assemblies relative to building integration and human health safety and welfare.

SC.4 Technical Knowledge: How the program ensures that students understand the established and emerging systems, technologies, and assemblies of building construction, and the methods and criteria architects use to assess those technologies against the design, economics, and performance objectives of projects.

Learning Outcome: Analyze environmental systems' design principles such as embodied energy, active and passive heating and cooling, indoor air quality, solar orientation, day lighting and artificial illumination, and acoustics; including the use of appropriate performance assessment tools.

SC.5 Design Synthesis: How the program ensures that students develop the ability to make design decisions within architectural projects while demonstrating synthesis of user requirements, regulatory requirements, site conditions, and accessible design, and consideration of the measurable environmental impacts of their design decisions.

Learning Outcome: Examine principles utilized in the appropriate selection of construction materials, products, components, and assemblies, based on their inherent characteristics and performance, including their environmental impact and reuse.

SC.6 Building Integration: How the program ensures that students develop the ability to make design decisions within architectural projects while demonstrating integration of building envelope systems and assemblies, structural systems, environmental control systems, life safety systems, and the measurable outcomes of building performance.

Learning Outcome: Examine basic principles involved in the appropriate application of building envelope systems and associated assemblies relative to building integration.

Upon completion of this course, it is expected that students will be able to:

- Represent, Gather, interpret, and select building system strategies appropriate to the studio problem and individual design work
- Analyze and Represent, through the use of diagrams, 3d modeling, and visuals the basic principles of building systems for both precedent studies and design work
- Articulate, with supporting evidence such as charts, figures, and details, the justifications for the environmental, regulatory, structural, atmospheric, and building material system selection
- Develop concepts to negotiate design work and building system strategies in order to produce a comprehensive project in partnership with ARCH 401
- Develop an understanding of the professional coordination and broad knowledge of systems required of the architect in the design of buildings through exposure to design and engineering professionals in lectures and in studio critique.

### **Course Description**

The course explores the interrelationships of the properties of passive design, materials, environmental systems, building envelope systems, and construction technology as they influence design-development and decision making in the design of the total building. A comprehensive and integrative process is presented.

Instructional Process Lectures, reading assignments and class discussion Analytical and generative modeling assignments Critique of student presentations- graphic, verbal and written material

### Schedule and Deliverables

Week 1: Introduction

Week 2-5: Assignment A-C (11x17) Sep 22: Presentation A-C

Week 6-8: Assignment D-E (11x17) Oct 13: Midterm Presentation

Week 9-13: Assignment F-H (11x17) Nov 20: Final Presentation of A-H

Dec 4- Integrated Presentation with ARCH 401 Final

### Final Grade Calculation

10%- Assignment A- Building Material and Assembly

- 10%- Assignment B- Building Envelope
- 10%- Assignment C- Environment 1: Passive Environmental Systems
- 10%- Assignment D- Site Analysis, Massing and Orientation in Response to Site
- 10%- Assignment E- Environment 2: Active Environmental Systems
- 10%- Assignment F- Building Service Systems: Water and Power
- 10%- Assignment G- Larger Building Service Systems: Circulation, MEP, AV/Security
- 10%- Assignment H- Outline Specification, Construction and Building Details
- 10%- Attendance and Participation
- 10%- Final Presentation

### Assignments and Assessment

Students will be asked to apply the principals learned through analysis and design in 8 assignments developing the students' design projects in Studio 7. Assignments will utilize the model and diagram as the key tools for analysis, design, representation and communication of building systems. The assignments aim to analyze and design the systems as a series of discrete systems that work together to serve a holistic design.

Assignments A-C will develop material and envelope research and design and establish the passive design of environmental systems.

Assignments D-E will develop the active environmental systems and essential water and power systems

Assignments F-H will develop the site-specific relationships using the selected systems and develop the design for specific sites and further develop the larger networked systems and building details.

Students are expected to demonstrate their understanding of the systems through each assignment. Assignment A-H will be subdivided into weekly assignments with value distributed equally between

the parts, drafts of each weekly assignment are due each week, the midterm and final presentations will compile the work completed from weekly assignments. The final presentation of the Total Building will include an integrated presentation of the work from A-H from this course.

Each week's sub-assignment will be assessed weekly according the following criteria:

- 0- No assignment turned in
- 1- Assignment turned in but incomplete and does not demonstrate understanding of the material
- 2- Assignment turned in but incomplete though demonstrates some understanding of the material
- 3- Assignment is complete and demonstrates understanding
- 4- Assignment is complete, demonstrates understanding and is exceptional in its clarity and concept

Criteria for Evaluation

Each Assignment will be evaluated for its

- 1. Analysis and Design clarity of systems
- 2. Articulation of detail, reference, description and justification of each system selection
- 3. Development of clear concepts that negotiate design and integration of building systems

Each Assignment will also be evaluated for the following specific criteria Assignment A- Building Material and Assembly (NAAB SC-1, SC.5, SC.6)

Assignment B- Building Envelope (NAAB SC-1, SC. 4, SC.5, SC.6)

Assignment C- Environment 1: Passive Environmental Systems (NAAB SC-1, SC. 4)

Assignment D- Environment 2: Active Environmental Systems (NAAB SC. 4)

Assignment E- Building Service Systems: Water and Power (NAAB SC. 4)

Assignment F- Site Analysis, Massing and Orientation in Response to Site (NAAB SC. 5)

Assignment G- Larger Building Service Systems: Circulation, MEP, AV/Security (NAAB SC. 5)

Assignment H- Outline Specification, Construction and Building Details (NAAB SC. 5)

### Estimate of Costs

Students should expect to expend the necessary resources to produce drafts and final for each assignment. Printing costs are dependent on current printing and plotting costs established by the university (please see labs).

Readings will be posted to moodle and reference material will be placed on reserve in the library. Students are expected to download reading materials from Moodle according to the schedule and must be prepared to discuss these materials in class. Students are responsible for posting all assignments to Moodle by the assignment due date.

### Attendance Policy

Students are expected to attend each session of studio to not miss key assignments, presentations, discussions and critique. It is impossible to make up a studio session- particularly when guests are visiting studio for discussions and critiques or for key presentations. If a presentation is missed the material intended to be presented on that date must be submitted complete to Moodle on the due date, and physically presented at the next class session.

### Submitting Late Work

Late work will be accepted; however, grading will be reduced by 5% if returned within a week and 10% if returned by the end of the semester

### **Moodle Policy**

Assignments will be posted to Moodle; students are expected to download reading materials from Moodle according to the schedule and must be prepared to discuss these materials in class. Students are responsible for posting all assignments to Moodle by the assignment due date.

### Web Cam Usage

Students are expected to use Ring Central, zoom, concept board and other platforms to interact with instructors and their peers digitally using webcam and audio for discussions and presentations. Webcam usage will be required during presentations. If the student is participating in a group discussion and is not presenting, they are able to mute their audio and turn off their web cam for reasons of background noise, bad reception or other personal reasons. However, participation in this course is part of the students' grading and this requires engaging other students and instructors actively.

#### DEPARTMENT POLICIES AND PROCEDURES

Requirements for Documentation and Archiving Each student must submit documentation of the full semester's work at the end of each term, in pdf format. Materials should include research, writing, and design work, including important study models and sketches. Studio faculty will further define how this work should be organized and presented before the end of the semester. Failure to submit the required documentation in usable format may result in a grade reduction in the final grade of the semester. Documentation of the studio work is essential for the NAAB accreditation process and assessment of the architecture program.

The university reserves the right to retain student work for archival purposes. Projects/models, assignments, and exams will be kept at the department's discretion for this purpose. Students will be asked to help with archiving their projects at the end of the semester.

#### Writing Requirements

All written work must meet the standards for English. Poorly written papers may be returned without a grade for revision and resubmission, and may be subject to grade reduction. Students are encouraged to utilize the Woodbury Writing Center. Link is <u>here</u>.

#### Studio Culture

The studio environment is an essential component in learning to become an architect. One goal of the School of Architecture is to create a vibrant, exploratory, safe and respectful learning culture for students. Only through respect between faculty and students, as well as students among themselves, can a healthy educational studio culture be fostered. Students are required to uphold high standards of behavior and academic discipline while in the studio. See the full Studio Guidelines and Studio Culture Policy for more information.

### School Policy on Social Equity and Diversity

Our mission is to provide an environment where people can learn, teach and work with a shared sense of purpose, core values and respect without bias towards individual beliefs, values and areas of difference. We do this in an effort to create a community that respects and values the full and equal inclusion of its members. Our goal is to provide an environment that is welcoming and inclusive of all.

#### Universal Pedagogy

Woodbury University is committed to making reasonable accommodations to assist individuals with disabilities in reaching their academic potential. Students desiring accommodations due to a physical, learning or psychological disability must first complete an Accommodations Request Form, which can be downloaded from http://go.woodbury.edu, and found under "Academic Resources." Accommodations cannot be granted prior to the instructor's receipt of a Notification of Academic Accommodation Plan (NAAP) from the Disabilities Coordinator. Accommodations are never provided retroactively. (For more information, contact the Disabilities Coordinator in the Whitten Center (818) 394-3345.)

#### **Academic Honesty**

Academic integrity is important for two reasons: first, independent and original scholarship ensures that students and scholars derive the most from their educational experience and the pursuit of knowledge. Second, academic dishonesty violates the most fundamental values of a community of scholars and depreciates the achievements of the entire University community. Accordingly, Woodbury University views academic dishonesty as one of the most serious offenses that a member of our community can commit. Adherence to the Academic Honesty Policy reflects the commitment of our community to the ideals of learning, research, and scholarship. See Catalog for the entire Academic Honesty Policy.

#### **Grade Requirements**

Refer to the Woodbury University catalog for grading standards and policies.

#### **Environmental Responsibility**

Studio projects shall be designed in a socially and environmentally responsible manner. All projects should reduce dependencies on non-renewable resources.

#### **Class Attendance**

It is mandatory that students take advantage of all scheduled course time. Regular attendance at EVERY class is expected throughout the duration of the class/studio time. Arrival at the beginning of the class period is required. Lateness or early departure will be considered as an absence. 'Regular and prompt attendance at all university classes is required. The instructor is not obligated to assign extra work or to prepare additional examinations for classes missed. It is understood that when 15% of the class time has been missed, the student's absence rate is excessive. Each instructor will announce his/her attendance policy in the course syllabus.

#### **Excused Absence**

Students should report any illness or emergency to their course instructor, preferably before missing the class, by emailing the instructor. Medical reasons for absences can alternatively be shared with the school nurse and/or the coordinator for the ODAS (disabilities office) who will notify instructor of receipt without revealing specific information.

Students who anticipate absence due to religious observance or similar commitments should speak with their instructor at the start of the term to review all dates in question and develop a plan to meet all course requirements.

#### Email

Students are advised to meet with their instructors during posted office hours. Face-to-face communication in discussing and resolving problems is preferable to email exchanges. Additionally, meetings must be scheduled in advance using email correspondence. Email correspondence must be written in a respectful and professional manner. It is the student's responsibility to consistently check for email. students should use their official woodbury.edu email account.

Due to confidentiality and FERPA requirements all faculty, staff and students, when corresponding through email, must use their university provided Woodbury.edu email accounts. Students are encouraged to check this email address regularly as it is the only email address in which they will receive official course or university information.

#### **Grievance Protocol**

Students should use the following protocol for questions, grievances, or general concerns about coursework and the studio environment. Health and safety concerns and emergencies should immediately be directed to campus security (818-252-5208). Academic concerns should be directed first to the student's instructor, and then to the

studio coordinator as appropriate. If further consultation is required, the student is advised to meet with the Coordinator and/or the Chair (Marc Neveu, both Undergraduate and Graduate).

#### **Class Syllabus and Structure**

While every effort will be made to follow the outline of the published syllabus, course structure and calendar may be changed at the instructor or coordinator's discretion. Announcements will be made if such changes occur. Students who miss class are responsible for tracking any such announcements.

#### ONLINE COURSE DELIVERY POLICIES AND GUIDELINES

#### Formats of delivery:

**Synchronous online:** All instruction is provided via the Internet and no face-to-face instruction is required. Faculty and learners meet for regularly scheduled class sessions.

Synchronous activities provide real-time dialogue that can provide the human interaction that is needed among our Woodbury student population.

**asynchronous online**: All instruction is provided via the Internet and no face-to-face instruction is required. Faculty and learners do not meet for regularly scheduled class sessions.

Asynchronous activities allow students with the flexibility to complete certain course work at their own pace, within reason. It also allows students time to think, write, and reflect.

**hybrid with synchronous online:** An instructional delivery method which combines the traditional delivery and the synchronous_distance delivery formats.

**hybrid with asynchronous online:** An instructional delivery method which combines the traditional delivery and the synchronous_distance delivery formats.

traditional: This delivery method allows learners and faculty to meet in person or as a group for regularly scheduled class sessions either on campus or at another physical location.

#### Type of course:

**Lecture**: Refers to the first or primary organization of non-lab class instruction, e.g., a lecture where instructor-based material is presented, or a seminar where material is analyzed and discussed by both students and instructor. Also includes case studies and team-based learning situations. Class meeting time equals 50 minutes per unit per week.

Studio: Refers to situations where the student is engaged in the practice and use of techniques for productions in the areas of architecture, interior design, graphic design, and other design forms. This instruction is used to further advance student's skills in their field of design. The instructor role varies from direct assistance to simple availability for questions and supervision. Class meeting time equals 100 minutes per unit per week.

Laboratory: Refers to the first organization of laboratory class instruction unless one of the other classifications above is more appropriate. Includes both group instruction and individualized instruction such as biology and physics lessons, supervised computing exercises, and hands-on

activities. Class meeting time equals 50 minutes per unit per week.

#### Length of sessions:

16-week (Fall/Spring) 7-week intensive format (Fall/Spring) 5-week intensive format (Fall/Spring) 10-week (Summer) 6-week (Summer Super Sessions)

#### **Online / Hybrid Requirements**

Students must have basic computer skills, including the use of word processing software, email, and the ability to use internet browsers, such as Safari, Firefox, or Chrome.

All communication by email will be using the assigned woodbury.edu address. Students are required to access this email account on a daily base to ensure timely communication.

Woodbury University's Learning Management System (LMS) of record is Moodle. Moodle should be used to provide students information they need to plan, prepare, and learn in the course. This information includes, but is not limited to: (a) your course syllabus; (b) assignment due dates, instructions, and grading rubrics; (c) course schedule; (d) additional course materials and links, etc.; and/or (e) exams.

Students are responsible for meeting the technical requirements of <u>Moodle</u> and <u>RingCentral</u> and to familiarize themselves with the Moodle Learning Management System and RingCentral Communications System.

IT provides a Moodle (and RingCentral for online delivery) orientation "course" visible to students enrolled in all courses. Students unfamiliar with Moodle are required to review or consult it as needed. This ensures class time is dedicated to course content and not technical tutorials. The syllabus should also indicate how IT will support students' online technical needs.

All required materials, including readings, videos, lectures will be posted on and can be accessed through Moodle.

All assignments have to be submitted through Moodle or <u>OneDrive</u>, depending on file size and faculty instructions.

Exams and quizzes will be administered through either Moodle or <u>Proctorio</u>. Students are required to install the Proctorio Extension in advance.

#### Attendance policy

Regular and prompt attendance at all University classes is required. It is the responsibility of the student to adhere to class/studio participation expectations. The instructor is not obligated to assign extra work or to prepare additional content for material missed. It is understood that when 15% of the class time has been missed, the student's absence rate is excessive. The interpretation of this participation policy is left to the discretion of individual faculty.

Attendance of synchronous classes will be measured through attendance of the RingCentral meetings. Students are required to have their camera turned on for the entire class session to be counted as present. If technical or privacy issues prevent the student from having the camera turned on, then the student must contact the Office of Student Affairs and apply for an exemption. Students must complete an Accommodations Request Form, which can be downloaded from http://go.woodbury.edu, and found under "Academic Resources." Accommodations cannot be granted prior to the instructor's receipt of a Notification of Special Needs Release Form from the Disabilities Coordinator. Accommodations are never provided retroactively.

Attendance of asynchronous classes will be measured through the last access to the course in Moodle, participation in quizzes and online discussions, as well as submitted assignments by the required day and time.

#### Protecting Privacy and Data During Remote Instruction

This class is being conducted over Ring Central and Moodle. As the host, the instructor may be recording the sessions. The recording feature for others is disabled so that no one else will be able to record the sessions. No recording by other means is permitted. The sessions will be posted on the Moodle class website unless otherwise notified. In case of privacy concerns and individual students wanting not to appear in the recording, the student must contact the Office of Student Affairs and apply for an exemption. Students must complete an Accommodations Request Form, which can be downloaded from http://go.woodbury.edu, and found under "Academic Resources." Accommodations cannot be granted prior to the instructor's receipt of a Notification of Special Needs Release Form from the Disabilities Coordinator. Accommodations are never provided retroactively. If the student prefers to use a pseudonym instead of the real name, please let the instructor know what name will be used so that the instructor knows who you the student is during the session.

Pursuant to the terms of the agreement between the vendors (Moodle and RingCentral) and Woodbury University, the data is used solely for this purpose and the vendor is prohibited from re-disclosing this information. Woodbury University also does not use the data for any other purpose. Recordings will be deleted when no longer necessary. However, the recording may become part of an administrative disciplinary record if misconduct occurs during a video conference.

### Calculation Of Grade

Letter grades are converted to numeric values using the following values:

Letter	GPA	%	Definition
А	4.00-3.84	96-100	Student learning and accomplishment far exceeds published objectives for the course/test/assignment and student work is distinguished consistently by is high level of competency and/or innovation.
A-	3.83-3.50	92-95	
B+	3.49-3.17	88-91	Student learning and accomplishment goes beyond what is expected in the published objectives for the course/test/assignment and student work is frequently characterized by its special depth of understanding, development, and/or innovative experimentation.
В	3.16-2.84	84-87	
B-	2.83-2.50	80-83	Students learning and accomplishment meets all published objectives for the course/test/assignment and the student work demonstrates the expected level of understanding, and application of concepts introduced.
C+	2.49-2.17	76-79	
С	2.16-1.84	72-75	
C-	1.83-1.50	68-71	Student learning and accomplishment based on the published objectives for the course/test/assignment were met with minimum passing achievement.
D+	1.49-1.17	64-67	
D	1.16-0.60	60-63	
F	0.00-0.60	< 60	Student learning and accomplishment based on the published objectives for the course/test/assignment were not sufficiently addressed nor met.

# Woodbury University School of Architecture Systems Integration ARCH 464

Semester: Fall 2019

Time: Monday 1:15-3:45 pm

Location:

Instructors: Matthew Gillis, Stephen Marshall, Eric Olson, Linda Taalman

Office hours: e-mail instructor for appointment

### **Catalog Description**

The interrelationships of the properties of materials, structures, environmental systems, building envelope systems, construction technology, building cost control, and life-cycle costs as they influence design-development and decision-making are examined. A comprehensive and integrative process is presented.

Three Unit Lecture. Prerequisites: ARCH 243, Materials and Methods; ARCH 425, Environmental Systems; and ARCH 326, Structures 1. Corequisite: ARCH 487, Design Studio 4A: Comprehensive Design.

### Learning Outcomes

Upon completion of this course, it is expected that students will be able to:

### 1. Represent:

Gather, interpret, and select building system strategies appropriate to the studio problem and individual design work

### 2. Analyze:

Analyze and Represent, through the use of diagrams, 3d modeling, and visuals the basic principles of building systems for both precedent studies and design work

### 3. Articulate:

Articulate, with supporting evidence such as charts, figures, and details, the justifications for the environmental, regulatory, structural, atmospheric, and building material system selection

### 4. Develop:

Develop concepts to negotiate design work and building system strategies in order to produce a comprehensive project in partnership with ARCH 487

Develop an understanding of the professional coordination and broad knowledge of systems required of the architect in the design of buildings through exposure to design and engineering professionals in lectures and in studio critique.

### NAAB Student Performance Criteria

### **B.4: Technical Documentation**

Ability to make technically clear drawings, prepare outline specifications, and construct models illustrating and identifying the assembly of materials, systems, and components appropriate for a building design.

### **B.6: Environmental Systems**

Understanding the principles of environmental systems' design, how systems can vary by geographic region, and the tools used for performance assessment. This must include active and passive heating and cooling, indoor air quality, solar systems, lighting systems, and acoustics.

### **B.7: Building Envelope Systems and Assemblies**

Understanding of the basic principles involved in the appropriate selection and application of building envelope systems relative to fundamental performance, aesthetics, moisture transfer, durability, and energy and material resources.

### **B.8: Building Materials and Assemblies**

Understanding of the basic principles utilized in the appropriate selection of interior and exterior construction materials, finishes, products, components and assemblies based on their inherent performance including environmental impact and reuse.

### **B.9: Building Service Systems**

Understanding of the basic principles and appropriate application and performance of building service systems including mechanical, plumbing, electrical, communication, vertical transportation security, and fire protection systems.

### **Course Description**

The course explores the interrelationships of the properties of passive design, materials, environmental systems, building envelope systems, construction technology as they influence designdevelopment and decision-making in the design of the total building are examined. A comprehensive and integrative process is presented.

Instructional Process

- 1- Lectures
- 2- Reading assignments and class discussion
- 3- Analytical and generative graphic assignments and written descriptions through presentations
- 4- Critique of students presentations- graphic and written material

### Schedule and Deliverables

Schedule and deliverables subject to change.

WEEK 1-5: Assignment 1(1A-1C)- 3 11x17 September 24: Assignment 1 due WEEK 6-13: Assignment 2(2A-2E)- 5 11x17 November 19: Assignment 2 due WEEK 14: Thanksgiving break WEEK 15: Studio finals

### **Final Grade Calculation**

30% Assignment 1- Design for Site (Precedent and Studio site)

10%- Assignment A- Site Analysis and Design

10%- Assignment B- Massing Orientation and Envelope in response to site

10%- Assignment C- Passive Environmental Envelope Systems

50% Assignment 2- Studio Systems Design

10%- Assignment D- Circulation accessibility and life safety

10%- Assignment E- Building Structure and Envelope Systems

10%- Assignment F- Active Environmental Systems

10%- Assignment G- Building Service Systems: MEP

10%- Assignment H- Building Materials and Assemblies

- 10% Attendance and Participation in discussions, lecture and labs
- 10% Final Presentations

### Assignments and Assessment

Students will be asked to apply the principals learned through analysis and design in two assignments. Both assignments will utilize the diagram as the key tool for representation and communication of building systems. Assignment 1 will analyze the site and conceptualize the students design project in the Comprehensive Studio. Assignment 2 will develop the students design project in the Comprehensive Studio through the design and development of the systems and detailed consideration of the building envelope and materials. Students are expected to demonstrate their mastery of understanding of the systems through both assignments. Assignment 1 & 2 will be subdivided into weekly assignment with value distributed equally between the parts, a new weekly assignment is due each week- the mid-term and final presentations will compile the work completed from the weekly assignments.

Each week's sub-assignment will be assessed weekly according the following criteria:

- 0- No assignment turned in
- 1- Assignment turned in but incomplete and does not demonstrate understanding of the material
- 2- Assignment turned in but incomplete though demonstrates some understanding of the material
- 3- Assignment is complete and demonstrates understanding
- 4- Assignment is complete, demonstrates understanding and is exceptional in its clarity and concept

Final assessment of the sub-parts of each assignment will be based on the completeness, clarify and demonstration of understanding. Each sub-part will be given a final percentage grade accounting for 10% of the overall grade for the course at the completion of the overall assignment.

### Assignment 1

- Develop a clear analysis and representation of site and design criteria, massing and orientation, envelope and aperture, passive heating and cooling and day lighting strategies using precedent case studies and the studio design project.
- Learning outcomes 1-3 and NAAB criteria B.7 (Building Envelope Systems and Assemblies), in addition to B.4 (Technical Documentation) and B.6 (Environmental Systems)

• Assessment/grading criteria used to generate grading rubrics.

Criteria below will be used in a matrix that is aligned with each sub assignment

- 1) Develops, analyzes and represents the building systems clearly (LO 2)
- 2) Articulates with detail, reference, description the justification for each system selection (LO 3)
- Conceptual Building Envelope responds appropriately to site and design criteria, proposes a clear massing and orientation, envelope and aperture solution, and applies good use of passive heating and cooling and day lighting strategies (NAAB B.7)
- 4) Clearly articulates analysis and documentation of problem (NAAB B.4)
- 5) Comprehension of Geographic Climatic Region and tools for performance assessment (NAAB B.6)

Assignment 2

- Develop a clear analysis and representation and design of circulation, envelope and structural integration, active heating and cooling systems, building service systems and building materials and assemblies solutions using the studio design project.
- Learning outcomes 1-5 and NAAB criteria B.7 (Building Envelope Systems and Assemblies), B.8 (Building Material and Assemblies, and B.9 (Building Service Systems) in addition to B.4 (Technical Documentation) and B.6 (Environmental Systems)
- Assessment/grading criteria used to generate grading rubrics.

## Criteria below will be used in a matrix that is aligned with each sub assignment

- 1) Develops, Analyzes and represents the building systems clearly (LO 2)
- 2) Articulates with detail, reference, description the justification for each system selection (LO 3)
- Develops clear concepts that negotiate design and building systems strategies in order to produce a comprehensive project (LO 4)
- 4) Student has a clear understanding of a broad knowledge of building systems and their coordination (LO 5)
- 5) Building Envelope integrates envelope systems strategies with circulation, structure, active heating and cooling systems and building service systems to achieve successful building performance (NAAB B.7)
- 6) Demonstrates understanding of basic principles for the appropriate selection of interior and exterior materials, finishes, products, components and assemblies based on their performance and environmental impact (NAAB B.8)
- 7) Demonstrates understanding of basic principles for the application and performance of building service systems to satisfy successful design of circulation, mechanical, electrical, plumbing, and fire protection systems (NAAB B.9)
- 8) Technically clear drawings illustrating and identifying the assembly of materials, systems and components (NAAB B.4)
- 9) Understands the principals of environmental systems design (NAAB B.6)

### Estimate of Costs

Students should expect to expend the necessary resources to produce drafts and final for each subassignment and Assignment 1 & 2. Printing costs are dependent on current printing and plotting costs established by the university (please see labs) and specific design solutions and material Readings will be posted to moodle and reference material will be placed on reserve in the library. Students are expected to download reading materials from Moodle according to the schedule and must be prepared to discuss these materials in class. Students are responsible for posting all assignments to Moodle by the assignment due date.

### Attendance Policy

Students are expected to attend each session of studio to not miss key assignments, presentations, discussions and critique. It is impossible to make up a studio session- particularly when guests are visiting studio for discussions and critiques or for key presentations. If a presentation is missed the material intended to be presented on that date must be submitted complete to Moodle on the due date, and physically presented at the next class session.

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Assignments will be posted to Moodle; students are expected to download reading materials from Moodle according to the schedule and must be prepared to discuss these materials in class. Students are responsible for posting all assignments to Moodle by the assignment due date.

#### DEPARTMENT POLICIES AND PROCEDURES

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The university reserves the right to retain student work for archival purposes. Projects/models, assignments, and exams will be kept at the department's discretion for this purpose. Students will be asked to help with archiving their projects at the end of the semester.

#### Writing Requirements

All written work must meet the standards for English. Poorly written papers may be returned without a grade for revision and resubmission, and may be subject to grade reduction. Students are encouraged to utilize the Woodbury Writing Center. Link is <u>here</u>.

#### Studio Culture

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### School Policy on Social Equity and Diversity

Our mission is to provide an environment where people can learn, teach and work with a shared sense of purpose, core values and respect without bias towards individual beliefs, values and areas of difference. We do this in an effort to create a community that respects and values the full and equal inclusion of its members. Our goal is to provide an environment that is welcoming and inclusive of all.

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#### **Academic Honesty**

Students are responsible for familiarizing themselves with Woodbury's Student Code of Conduct, which can be found in the Catalog. Academic misconduct, dishonesty, plagiarism, and cheating will not be tolerated and may lead to failure of the course.

#### **Grade Requirements**

Refer to the Woodbury University catalog for grading standards and policies.

#### **Environmental Responsibility**

Studio projects shall be designed in a socially and environmentally responsible manner. All projects should reduce dependencies on non-renewable resources.

#### **Class Attendance**

It is mandatory that students take advantage of all scheduled course time. Regular attendance at EVERY class is expected throughout the duration of the class/studio time. Arrival at the beginning of the class period is required. Lateness or early departure will be considered as an absence. 'Regular and prompt attendance at all university classes is required. The instructor is not obligated to assign extra work or to prepare additional examinations for classes missed. It is understood that when 15% of the class time has been missed, the student's absence rate is excessive. Each instructor will announce his/her attendance policy in the course syllabus.

#### Excused Absence

Students should report any illness or emergency to their course instructor, preferably before missing the class, by emailing the instructor. Written documentation (doctor's note, etc.) is required for an excused absence, and should be submitted to the instructor at the next class meeting. Extended absence due to medical issues, family issues, etc. should be reported to the Dean of Students' office for appropriate documentation.

Students who anticipate absence due to religious observance or similar commitments should speak with their instructor at the start of the term to review all dates in question and develop a plan to meet all course requirements.

#### Email

Students are advised to meet with their instructors during posted office hours. Face-to-face communication in discussing and resolving problems is preferable to email exchanges. Additionally, meetings must be scheduled in advance using email correspondence. Email correspondence must be written in a respectful and professional manner. It is the student's responsibility to consistently check for email.

#### **Grievance Protocol**

Students should use the following protocol for questions, grievances, or general concerns about coursework and the studio environment. Health and safety concerns and emergencies should immediately be directed to campus security (818-252-5208). Academic concerns should be directed first to the student's instructor, and then to the studio coordinator as appropriate. If further consultation is required, the student is advised to meet with the Coordinator and/or the Chair (Marc Neveu, both Undergraduate and Graduate).

#### **Class Syllabus and Structure**

While every effort will be made to follow the outline of the published syllabus, course structure and calendar may be changed at the instructor or coordinator's discretion. Announcements will be made if such changes occur. Students who miss class are responsible for tracking any such announcements.

### Calculation Of Grade

Letter grades are converted to numeric values using the following values:

Letter	GPA	%	Definition
А	4.00-3.84	96-100	Student learning and accomplishment far exceeds published objectives for the course/test/assignment and student work is distinguished consistently by is high level of competency and/or innovation.
A-	3.83-3.50	92-95	
B+	3.49-3.17	88-91	Student learning and accomplishment goes beyond what is expected in the published objectives for the course/test/assignment and student work is frequently characterized by its special depth of understanding, development, and/or innovative experimentation.
В	3.16-2.84	84-87	
В-	2.83-2.50	80-83	Students learning and accomplishment meets all published objectives for the course/test/assignment and the student work demonstrates the expected level of understanding, and application of concepts introduced.
C+	2.49-2.17	76-79	
С	2.16-1.84	72-75	
C-	1.83-1.50	68-71	Student learning and accomplishment based on the published objectives for the course/test/assignment were met with minimum passing achievement.
D+	1.49-1.17	64-67	
D	1.16-0.60	60-63	
F	0.00-0.60	< 60	Student learning and accomplishment based on the published objectives for the course/test/assignment were not sufficiently addressed nor met.

# Woodbury University School of Architecture Studio 4A ARCH 487

Semester: Fall 2019

Time: Tuesday / Friday 1:15-6:15 pm

Location:

Instructors: Matthew Gillis, Stephen Marshall, Eric Olsen, Linda Taalman

Office hours: e-mail instructor for appointment

### **Catalog Description**

Students produce a comprehensive architectural project based upon a building program and site that includes the development of programmed space, demonstrating an understanding of structural and environmental systems, life-safety provisions, wall sections, building assemblies, and the principles of sustainability. The studio is open to fourth- and fifth-year students. The last half of the semester will be devoted to design development.

Six unit Studio. Prerequisites: ARCH 384, Studio 3B, ARCH 326, Structures 1; and ARCH 425, Environmental Systems. Corequisite: ARCH 464 Systems Integration.

### Learning Outcomes

Upon completion of this course, it is expected that students will be able to:

- 1. Conceptualize well thought out design solutions, in response to specific site and passive design considerations, incorporating techniques of siting, massing, orientation and passive heating and cooling.
- Develop through Representations (visualizations and modeling) design decisions and design strategies for the integration of building systems, specifically with regards to the design development of building envelope, materials and assemblies and services that serve and integrate with primary circulation, structure and active systems.
- Design and Document a Comprehensive project taking into consideration precedents, local codes and regulations, and the selection and integration of appropriate building systems. Documentation to include clear technical documentation of the project including site and floor plans, sections and elevations and detailed wall sections.
- 4. Develop an understanding of an Integrative Design Approach, and a holistic understanding of the interrelationship of systems in the execution of a complex architectural project that is mindful of the environment and sustainability.
- 5. Use critical thinking skills and problem solving learned in all previous design studios to design a building that responds to contemporary and relevant social and civic problems facing the profession of architecture today.

### NAAB Student Performance Criteria Mastered

### B.2: Site Design

Ability to respond to site characteristics including urban context and developmental patterning, historical fabric, soil, topography, climate, building orientation, and watershed in the development of a project design.

### **B.3: Codes and Regulations**

Ability to design sites, facilities and systems consistent with the principles of lifesafety standards, accessibility standards, and other codes and regulations.

### **B.4: Technical Documentation**

Ability to make technically clear drawings, prepare outline specifications, and construct models illustrating and identifying the assembly of materials, systems, and components appropriate for a building design.

### C.2: Integrative Evaluation and Decision-Making Design Processes

Ability to demonstrate the skills associated with making integrated decisions across multiple systems and variables in the completion of a design project. This demonstration includes problem identification, setting evaluative criteria, analyzing solutions, and predicting the effectiveness of implementation.

### C.3: Integrative Design

Ability to make design decisions within a complex architectural project while demonstrating broad integration and consideration of environmental stewardship, technical documentation, accessibility, site conditions, life safety, environmental systems, structural systems, and building envelope systems and assemblies.

### Course Description

This year's Studio 4A will focus on the questioning of how technological developments affect architecture both programmatically and performatively through the problem of housing and the effects of climate change on our environment. Each studio will take on a specific site and approach to this civic institution.

The studio will question how architecture and the built environment play a role in shaping our behavior as much as it is a container for controlling climate. The integration of technology and the design of our spaces intersect to create new experiences and environments.

Studio 4A is the Comprehensive Design Studio, in which students will develop a complex architectural project to a design development level that culminates in a highly detailed documentation of their design. Each project is expected to incorporate the essential aspects of design – site, circulation, structural and environmental systems with more detailed and integrated design decisions in terms of building envelope, building material and building service systems. The framework of the studio is rigorous in its effort to guide the student to this advanced level of development and the pace of the studio rapidly progresses from conceptualization to design development. Students' projects are expected to incorporate a technical level of detail and understanding, from local codes and regulations, including ADA and life safety, to conventions of architectural documentation, including detailed drawings and specifications. The studio will make use of multiple methodologies of design in the visualization and development of the projects, incorporating projective and axonometric drawings, physical and digital modeling, and graphic representations.

Studio 4A is developed in tandem with the ARCH 464 Systems Integration course and together they integrate the tools and knowledge necessary to develop a fully integrative Comprehensive Design project. Through lectures, in-class critiques and consultant round tables the studio and seminar will introduce the students to a spectrum of design and engineering professionals, giving students the opportunity to have direct feedback on their design projects.

### Schedule and Deliverables

Schedule and deliverables subject to change. September 17- Concept Design presentation (Assignment 1) October 18- Midterm presentation: Building Design (Assignment 2) November 15- Design documentation presentation (Assignment 3) December 6- Studio Final presentation (incorporates Ass. 1-3 and Final Presentation req.)

### Final Grade Calculation

- 20% Concept Design
- 20% Midterm Presentation
- 20% Design Documentation
- 30% Final Presentation
- 10% Overall development, Attendance and Participation in studio

### **Assignments and Assessment**

The Assignments progress quickly from conceptualizing to building design and detailed development of the project to produce a highly resolved and comprehensive project. Each Assignment and sub part build on the last and adds a level of complexity and further re-evaluation to produce a thoughtful integrated solution.

Assignment 1: Concept Design

• Students will conceptually develop the site and program given through critical analysis of precedents, analysis of the site, passive design in response to the site conditions, and thoughtful development of the program into clear massing strategies.

This assignment consists of 3 key parts

Part 1: Precedent Research Analysis (plan, section and 3d)

Part 2: Site model and Site diagrams

Part 3: Program and Massing diagrams and models

- Learning outcomes 1 and 2 and NAAB criteria B.2 (Site Design), C.2 (Integrative Evaluation and Decision-Making Design Processes) and C.3 (Integrative Design)
- Assessment/grading criteria used to generate grading rubrics.

Criteria below will be used in a matrix that is aligned with each sub assignment

- 1) Analysis and Research (LO 1)
- Develops clear Conceptual strategies in response to site and precedent, develops clear passive design strategies of massing, orientation and passive heating and cooling (NAAB B.2, LO 2)
- 3) Clear integrative approach and design decision making (NAAB C.2)
- 4) Integrative design approach- integration of multiple strategies in the creation of a holistic design (NAAB C.3)

Assignment 2: Building and Envelope Design

• Students will develop their project into a building taking into consideration the primary physical and spatial systems of architecture- circulation, structure, envelope and active systems. The physical integration of these primary systems with the Concept Design and their compatibility with the site and passive design strategies is the key objective.

This assignment consists of 3 key parts

Part 1: Building Circulation diagrams and models

Part 2: Building Structural diagrams and models

- Part 3: Envelope diagrams and models describing spatial and systems strategies
- Learning outcomes 3 and NAAB criteria C.2 (Integrative Evaluation and Decision-Making Design Processes) and C.3 (Integrative Design)

• Assessment/grading criteria used to generate grading rubrics.

Criteria below will be used in a matrix that is aligned with each sub assignment

- 1) Develops the project through representation of a clear building design that successfully integrates the primary physical systems with the conceptual design (LO 3)
- 2) Conceptual Building Envelope responds appropriately to site and design criteria, and passive design goals (NAAB B.2, LO 3)
- 3) Clear integrative approach and design decision making (NAAB C.2)
- 4) Integrative design approach- integration of multiple strategies in the creation of a holistic design (NAAB C.3)

Assignment 3: Design Documentation

• Students will develop their project into a building taking into consideration the primary physical and spatial systems of architecture- circulation, structure, envelope and active systems. The physical integration of these primary systems with the Concept Design and their compatibility with the site and passive design strategies is the key objective.

This assignment is focused on the completion of the primary design documentation for the project as a series of black and white architectural drawings that clearly articulate the project.

- Part 1: Design Documentation
- Site Plan, Floor Plans, Elevations and Sections Part 2: Material Strategies and detail
- Detailed wall sections
- Material studies
- Learning outcomes 3 and 4 and NAAB criteria B.3 (Codes and Regulations) and B.4 (Technical Documentation)
- Assessment/grading criteria used to generate grading rubrics.

Criteria below will be used in a matrix that is aligned with each sub assignment

- 1) Develops the project through clear drawings that describe a developed building design successfully integrating all the systems into an architectural project (LO 3)
- Project successfully demonstrates ability to apply local codes and regulations in the building design and the development of plans, sections and elevations and selection of the appropriate building systems (LO 4 and NAAB B.3)
- 3) Detailed technical documentation of the project through technical drawings (NAAB B.4)

Assignment 4: Final Presentation

 The final presentation compiles and presents the work of the semester alongside a culminating large-scale model. A final model of the proposed project demonstrates the comprehensive qualities of the project and is intended to articulate the interrelationships between the site and building and the integration of primary and detailed building systems.

The final assignment consists of the following parts

- Final Presentation: Assignment 1-3 combined and large-scale sectional model of project
- The final presentation will be a comprehensive evaluation of the work of the entire semester and will be graded on the basis of all 5 Learning Outcomes for this course and NAAB Criteria B.3, B.4, C.2, and C.3
- Assessment/grading criteria used to generate grading rubrics.

Criteria below will be used in a matrix that is aligned with each sub assignment

- 1) Analysis and Research (LO 1)
- 2) Develops clear Conceptual strategies in response to site, develops clear passive design strategies of massing, orientation and passive heating and cooling (LO 2)
- 3) Develops the project through representation of a clear building design that successfully integrates the primary physical systems with the conceptual design (LO 3)
- 4) Conceptual Building Envelope responds appropriately to site and design criteria, and passive design goals (LO 3)
- 5) Develops the project through clear drawings that describe a developed building design successfully integrating all the systems into an architectural project (LO 3)
- 6) Project successfully demonstrates ability to apply local codes and regulations in the building design and the development of plans, sections and elevations and selection of the appropriate building systems (LO 4 and NAAB B.3)
- 7) Detailed technical documentation of the project through technical drawings (NAAB B.4)
- 8) Clear integrative approach and design decision making (NAAB C.2)
- 9) Integrative design approach- integration of multiple strategies in the creation of a holistic design (LO5 and NAAB C.3)

### Estimate of Costs

Students should expect to expend the necessary resources to produce drafts and final for each subpart of the Assignment. Printing costs are dependent on current printing and plotting costs established by the university (please see labs) and specific design solutions and material requirements for modeling materials. Estimated printing and model making costs detailed below.

Printing budget- \$500 Model making costs- \$500

### Attendance Policy

Students are expected to attend each session of studio to not miss key assignments, presentations, discussions and critique. It is impossible to make up a studio session- particularly when guests are visiting studio for discussions and critiques or for key presentations. If a presentation is missed the material intended to be presented on that date must be submitted complete to Moodle on the due date, and physically presented at the next class session.

### **Moodle Policy**

Assignments will be posted to Moodle; students are expected to download reading materials from Moodle according to the schedule and must be prepared to discuss these materials in class. Students are responsible for posting all assignments to Moodle by the assignment due date.

#### DEPARTMENT POLICIES AND PROCEDURES

#### Requirements for Documentation and Archiving Each student must submit documentation of the full semester's work at the end of each term, in pdf format. Materials should include research, writing, and design work, including important study models and sketches. Studio faculty will further define how this work should be organized and presented before the end of the semester. Failure to submit the required documentation in usable format may result in a grade reduction in the final grade of the semester. Documentation of the studio work is essential for the NAAB accreditation process and assessment of the architecture program.

The university reserves the right to retain student work for archival purposes. Projects/models, assignments, and exams will be kept at the department's discretion for this purpose. Students will be asked to help with archiving their projects at the end of the semester.

#### Writing Requirements

All written work must meet the standards for English. Poorly written papers may be returned without a grade for revision and resubmission, and may be subject to grade reduction. Students are encouraged to utilize the Woodbury Writing Center. Link is <u>here</u>.

#### Studio Culture

The studio environment is an essential component in learning to become an architect. One goal of the School of Architecture is to create a vibrant, exploratory, safe and respectful learning culture for students. Only through respect between faculty and students, as well as students among themselves, can a healthy educational studio culture be fostered. Students are required to uphold high standards of behavior and academic discipline while in the studio. See the full Studio Guidelines and Studio Culture Policy for more information.

### School Policy on Social Equity and Diversity

Our mission is to provide an environment where people can learn, teach and work with a shared sense of purpose, core values and respect without bias towards individual beliefs, values and areas of difference. We do this in an effort to create a community that respects and values the full and equal inclusion of its members. Our goal is to provide an environment that is welcoming and inclusive of all.

#### **Universal Pedagogy**

Woodbury University is committed to making reasonable accommodations to assist individuals with disabilities in reaching their academic potential. Students desiring accommodations due to a physical, learning or psychological disability must first complete an Accommodations Request Form, which can be downloaded here, and found under "Academic Resources." Accommodations cannot be granted prior to the instructor's receipt of a Notification of Special Needs Release Form from the Disabilities Coordinator. Accommodations are never provided retroactively. (For more information, contact the Disabilities Coordinator (818) 394-3345.)

#### **Academic Honesty**

Students are responsible for familiarizing themselves with Woodbury's Student Code of Conduct, which can be found in the Catalog. Academic misconduct, dishonesty, plagiarism, and cheating will not be tolerated and may lead to failure of the course.

#### **Grade Requirements**

Refer to the Woodbury University catalog for grading standards and policies.

#### **Environmental Responsibility**

Studio projects shall be designed in a socially and environmentally responsible manner. All projects should reduce dependencies on non-renewable resources.

#### **Class Attendance**

It is mandatory that students take advantage of all scheduled course time. Regular attendance at EVERY class is expected throughout the duration of the class/studio time. Arrival at the beginning of the class period is required. Lateness or early departure will be considered as an absence. 'Regular and prompt attendance at all university classes is required. The instructor is not obligated to assign extra work or to prepare additional examinations for classes missed. It is understood that when 15% of the class time has been missed, the student's absence rate is excessive. Each instructor will announce his/her attendance policy in the course syllabus.

#### Excused Absence

Students should report any illness or emergency to their course instructor, preferably before missing the class, by emailing the instructor. Written documentation (doctor's note, etc.) is required for an excused absence, and should be submitted to the instructor at the next class meeting. Extended absence due to medical issues, family issues, etc. should be reported to the Dean of Students' office for appropriate documentation.

Students who anticipate absence due to religious observance or similar commitments should speak with their instructor at the start of the term to review all dates in question and develop a plan to meet all course requirements.

#### Email

Students are advised to meet with their instructors during posted office hours. Face-to-face communication in discussing and resolving problems is preferable to email exchanges. Additionally, meetings must be scheduled in advance using email correspondence. Email correspondence must be written in a respectful and professional manner. It is the student's responsibility to consistently check for email.

#### **Grievance Protocol**

Students should use the following protocol for questions, grievances, or general concerns about coursework and the studio environment. Health and safety concerns and emergencies should immediately be directed to campus security (818-252-5208). Academic concerns should be directed first to the student's instructor, and then to the studio coordinator as appropriate. If further consultation is required, the student is advised to meet with the Coordinator and/or the Chair (Marc Neveu, both Undergraduate and Graduate).

#### **Class Syllabus and Structure**

While every effort will be made to follow the outline of the published syllabus, course structure and calendar may be changed at the instructor or coordinator's discretion. Announcements will be made if such changes occur. Students who miss class are responsible for tracking any such announcements.

### Calculation Of Grade

Letter grades are converted to numeric values using the following values:

Letter	GPA	%	Definition
А	4.00-3.84	96-100	Student learning and accomplishment far exceeds published objectives for the course/test/assignment and student work is distinguished consistently by is high level of competency and/or innovation.
A-	3.83-3.50	92-95	
B+	3.49-3.17	88-91	Student learning and accomplishment goes beyond what is expected in the published objectives for the course/test/assignment and student work is frequently characterized by its special depth of understanding, development, and/or innovative experimentation.
В	3.16-2.84	84-87	
B-	2.83-2.50	80-83	Students learning and accomplishment meets all published objectives for the course/test/assignment and the student work demonstrates the expected level of understanding, and application of concepts introduced.
C+	2.49-2.17	76-79	
С	2.16-1.84	72-75	
C-	1.83-1.50	68-71	Student learning and accomplishment based on the published objectives for the course/test/assignment were met with minimum passing achievement.
D+	1.49-1.17	64-67	
D	1.16-0.60	60-63	
F	0.00-0.60	< 60	Student learning and accomplishment based on the published objectives for the course/test/assignment were not sufficiently addressed nor met.

# Syllabi A.7 Use of Precedents (M. Arch)

# Woodbury University School of Architecture Building 4: Environmental Systems Integration ARCH 547

Semester:Spring 2020Time:Tuesday/Friday 9:00-11:30 AMLocation:AL102Instructor(s):Linda TaalmanOffice hours:Monday 1-4pm

### **Catalog Description**

Credits 3.0. Students learn an integrated approach to managing structural and environmental performance and human comfort. The approach to ambient control includes active and passive options, vernacular models, and considerations of climate and materiality. Discussion integrates the functionality, phenomenological effect, and resource impact of system selection. Prerequisites: Building 3

### Learning Outcomes

Upon completion of this course, it is expected that students will be able to:

- Experiment with building composition, systems, and assemblies as a negotiation between human comfort, environmental positioning and resource management.
- Pursue basic building performance analysis through introductions to environmental responsive modeling
- Analyze and represent building performance using modeling and diagrams and industry standard integration representation
- Demonstrate an understanding of building envelope and material assemblies and their fundamental performance characteristics and environmental impact.
- Demonstrate an understanding of environmental design, including both passive and active systems.
- Demonstrate an understanding of building services including MEP, circulation systems, and life safety systems
- Demonstrate ability to design sites and buildings compliant with accessibility and life safety
- Demonstrate ability to produce technically clear drawings and construct models detailing the assemblage of materials, systems and articulate the specific components.
## NAAB Student Performance Criteria

## B.3: Codes and Regulations

Ability to design sites, facilities and systems consistent with the principles of life-safety standards, accessibility standards, and other codes and regulations.

## **B.4: Technical Documentation**

Ability to make technically clear drawings, prepare outline specifications, and construct models illustrating and identifying the assembly of materials, systems, and components appropriate for a building design.

## **B.6: Environmental Systems**

Understanding the principles of environmental systems' design, how systems can vary by geographic region, and the tools used for performance assessment. This must include active and passive heating and cooling, indoor air quality, solar systems, lighting systems, and acoustics.

## **B.7: Building Envelope Systems and Assemblies**

Understanding of the basic principles involved in the appropriate selection and application of building envelope systems relative to fundamental performance, aesthetics, moisture transfer, durability, and energy and material resources.

## **B.8: Building Materials and Assemblies**

Understanding of the basic principles utilized in the appropriate selection of interior and exterior construction materials, finishes, products, components and assemblies based on their inherent performance including environmental impact and reuse.

## **B.9: Building Service Systems**

Understanding of the basic principles and appropriate application and performance of building service systems including mechanical, plumbing, electrical, communication, vertical transportation, security and fire protection systems

## **B.10: Financial Considerations**

Understanding of the fundamentals of building costs, which must include project financing methods and feasibility, construction cost estimating, construction scheduling, operational costs, and life-cycle costs.

## **Course Description**

The course explores the interrelationships of the properties of passive design, materials, environmental systems, building envelope systems, and construction technology as they influence design-development and decision making in the design of the total building. A comprehensive and integrative process is presented.

Instructional Process Lectures, reading assignments and class discussion Analytical and generative modeling assignments Critique of student presentations- graphic, verbal and written material

## Schedule and Deliverables

Week 1: Introduction

Week 2-5: Assignment A-C (11x17) February 11: Presentation A-C Week 6-8: Assignment D-E (11x17) March 7: Midterm Presentation

Week 9-13: Assignment F-H (11x17) April 14- Final Presentation of A-H

May 1- Integrated Presentation with ARCH 589 Final

## **Final Grade Calculation**

10%- Assignment A- Building Material and Assembly
10%- Assignment B- Building Envelope
10%- Assignment C- Environment 1: Passive Environmental Systems
10%- Assignment D- Environment 2: Active Environmental Systems
10%- Assignment E- Building Service Systems: Water and Power
10%- Assignment F- Site Analysis, Massing and Orientation in Response to Site
10%- Assignment G- Larger Building Service Systems: Circulation, MEP, AV/Security
10%- Assignment H- Outline Specification, Construction and Building Details
10%- Attendance and Participation
10%- Final Presentation

Students will be asked to apply the principals learned through analysis and design in 8 assignments developing the students' design projects in the Total Building Studio. Assignments will utilize the model and diagram as the key tools for analysis, design, representation and communication of building systems. The assignments aim to analyze and design the systems as a series of discrete systems that work together to serve a holistic design.

Assignments A-C will develop material and envelope research and design and establish the passive design of environmental systems.

Assignments D-E will develop the active environmental systems and essential water and power systems

Assignments F-H will develop the site-specific relationships using the selected systems and develop the design for specific sites and further develop the larger networked systems and building details.

Students are expected to demonstrate their understanding of the systems through each assignment. Assignment A-H will be subdivided into weekly assignments with value distributed equally between the parts, drafts of each weekly assignment are due each week, the midterm and final presentations will compile the work completed from weekly assignments. The final presentation of the Total Building will include an integrated presentation of the work from A-H from this course.

Criteria for Evaluation

Each Assignment will be evaluated for its

- 1. Analysis and Design clarity of systems
- 2. Articulation of detail, reference, description and justification of each system selection
- 3. Development of clear concepts that negotiate design and integration of building systems

Each Assignment will also be evaluated for the following specific criteria Assignment A- Building Material and Assembly (NAAB B-8) Assignment B- Building Envelope (NAAB B-7) Assignment C- Environment 1: Passive Environmental Systems (NAAB B-6) Assignment D- Environment 2: Active Environmental Systems (NAAB B-6) Assignment E- Building Service Systems: Water and Power NAAB B-6 and B-9) Assignment F- Site Analysis, Massing and Orientation in Response to Site (NAAB B-6 and B-7) Assignment G- Larger Building Service Systems: Circulation, MEP, AV/Security (NAAB B-3 and B-9) Assignment H- Outline Specification, Construction and Building Details (NAAB B-4 and B-10)

## Estimate of Costs

Students should expect to expend the necessary resources to produce drafts and final for each assignment. Printing costs are depending upon current pricing and plotting costs established by the university (please see labs) and specific design solutions and material requirements for modeling materials.

## **Attendance Policy**

Students are expected to attend each session of class to not miss key lectures, discussions and feedback. Review of assignments, presentations and critique will be presented during class time. It is not possible to make up missed lectures, discussion or critique. If a presentation is missed the material intended to be presented on that date must be submitted complete to moodle and physically presented at the next class session.

## **Moodle Policy**

Readings and assignments will be posted to moodle. Students are expected to download materials from moodle and be familiar with the material and prepared to discuss these materials in class. Students are responsible for posting all assignments by the assignment due date.

#### DEPARTMENT POLICIES AND PROCEDURES

#### **Requirements for Documentation and Archiving**

Every student is responsible for digitally archiving their work. An assignment that has not been digitally archived will be considered incomplete and will not receive credit. Please use the process provided by your instructor to produce a single PDF document for each assignment. Failure to submit the required documentation in usable format may result in a grade reduction in the final grade of the semester. Documentation of the studio work is essential for the NAAB accreditation process and assessment of the architecture program.

The university reserves the right to retain student work for archival purposes. Projects/models, assignments, and exams will be kept at the department's discretion for this purpose. Students will be asked to help with archiving their projects at the end of the semester.

#### Writing Requirements

All written work must meet the standards for English. Poorly written papers may be returned without a grade for revision and resubmission, and may be subject to grade reduction. Students are encouraged to utilize the Woodbury Writing Center.

#### **Studio Culture**

The studio environment is an essential component in learning to become an architect. One goal of the School of Architecture is to create a vibrant, exploratory, safe and respectful learning culture for students. Only through respect between faculty and students, as well as students among themselves, can a healthy educational studio culture be fostered. Students are required to uphold high standards of behavior and academic discipline while in the studio. See the full Studio Guidelines and Studio Culture Policy for more information.

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#### Accommodations for students with identified disabilities

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#### Academic Honesty

Because the integrity of the academic enterprise of any institution of higher education requires honesty in scholarship and research, academic honesty is required at Woodbury University. Academic integrity is important for two reasons: first, independent and original scholarship ensures that students and scholars derive the most from their educational experience and the pursuit of knowledge. Second, academic dishonesty violates the most fundamental values of a community of scholars and depreciates the achievements of the entire University community. Accordingly, Woodbury University views academic dishonesty as one of the most serious offenses that a member of our community can commit. Adherence to the Academic Honesty Policy reflects the commitment of our community to the ideals of learning, research, and scholarship. See Catalog for the entire Academic Honesty Policy.

#### Grade Requirements

Refer to the Woodbury University catalog for grading standards and policies.

#### **Environmental Responsibility**

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#### **Class Attendance**

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#### **Excused Absence**

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#### Email

Students are advised to meet with their instructors during posted office hours. Face-to-face communication in discussing and resolving problems is preferable to email exchanges. Additionally, meetings must be scheduled in advance using email correspondence. Email correspondence must be written in a respectful and professional manner. It is the student's responsibility to consistently check for email.

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#### **Class Syllabus and Structure**

While every effort will be made to follow the outline of the published syllabus, course structure and calendar may be changed at the instructor or coordinator's discretion. Announcements will be made if such changes occur. Students who miss class are responsible for tracking any such announcements.

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А	4.00-3.84	96-100	Student learning and accomplishment far exceeds published objectives for the course/test/assignment and student work is distinguished consistently by is high level of competency and/or innovation.
A-	3.83-3.50	92-95	
B+	3.49-3.17	88-91	Student learning and accomplishment goes beyond what is expected in the published objectives for the course/test/assignment and student work is frequently characterized by its special depth of understanding, development, and/or innovative experimentation.
В	3.16-2.84	84-87	
B-	2.83-2.50	80-83	Students learning and accomplishment meets all published objectives for the course/test/assignment and the student work demonstrates the expected level of understanding, and application of concepts introduced.
C+	2.49-2.17	76-79	
С	2.16-1.84	72-75	
C-	1.83-1.50	68-71	Student learning and accomplishment based on the published objectives for the course/test/assignment were met with minimum passing achievement.
D+	1.49-1.17	64-67	
D	1.16-0.60	60-63	
F	0.00-0.60	< 60	Student learning and accomplishment based on the published objectives for the course/test/assignment were not sufficiently addressed nor met.



# IN THE THICK OF IT

ARCH 584 / GRADUATE STUDIO 2 LIVING ORGANIZATIONS

SPRING 2020 / JAN 13 - MAY 3

T / F 1:15 PM - 6:15 PM 6 UNIT CREDIT JSI BUILDING

**INSTRUCTOR / ANALI GHARAKHANI** 

EMAIL / Anali.Gharakhani@woodbury.edu

Office Hours / by appointment



Mural by Drawing Architecture Studio / 798 Panoramic / 2017

# SYLLABUS

CATALOG DESCRIPTION

Students expose increasing complexity in architectural space through mining the conceptual organizing logics of design through the cumulative exploration of relationships. Programming, contextual and environmental prompts, regulating principles, circulation and urban networks, and systems of assembly become formative drivers through an investigation of habits, habitats, and inhabitations.

Six Unit Studio. Prerequisite: Graduate Studio 1

#### LEARNING OUTCOMES

Upon completion of this course, it is expected that students will be able to:

- 1. Emphasize built expression as a human interface and a response to the desires and needs of habitation.
- Study human behavior and program through actions, choreographies, and circulations as determinants of built form and performance (incorporating architecture standards for documenting doors, windows, ramps, stairs, etc).
- 3. Work through and assign materiality and develop building details according to an experiential agenda.
- Test negotiations of concept, content, and context in the development of an architecture.
- 5. Communication Skills: ability to read, write, speak and listen effectively through the completion of all studio requirements and synthesis of a coherent verbal, textual and graphic presentation.
- 6. Design Thinking Skills: ability to raise clear and precise questions, establish and use abstract ideas to interpret information, consider diverse points of view, reach well-reasoned conclusions and test alternative outcomes against relevant criteria and standards.
- 7. Visual Communication Skills: ability to use appropriate representational media, such as traditional graphic and digital technology skills, to convey essential formal elements at each stage of the programming and design process.
- 8. Use of Precedents: ability to examine and comprehend the fundamental principles present in relevant precedents and to make choices regarding the incorporation of such principles into architecture and urban design projects.
- Analyze and Argue: ability to define a set of clear architectural intentions supported by research and completion of assigned readings, precedent studies and in-class examples.
- 10. Diagram: ability to use a set of geometric relationships to both explain intention and generate architectural form.
- 11. Represent: ability to describe architecture through two and three-dimensional drawing and digital/physical modeling.
- 12. Professionalism: consistent timely attendance, participation and respect to instructors and classmates.

#### COURSE DESCRIPTION

In architecture, poché is commonly used to represent mass. As an architectural convention it implies a threshold between spaces in addition to the availability of occupiable space or lack thereof. In architectural drawings it is often used to highlight thickness, structure, material or solid from void. Representationally, poché can aid the drawing's visual properties while alluding to tangible architectural conditions. Although poché as a drawing convention has a long-lived history, it often becomes an afterthought. A simple way to express fill. Canonical works of architecture, such as those drawn by Étienne-Louis Boullée and Andrea Palladio, use this convention as a design tool to configure spatial moments of thick and thin, identify differences and similarities between interior and exterior as well as imposing classical order. Many of these drawings were represented orthographically in plan, section and elevation but more importantly in axonometric and oblique views, highlighting important moments of poché.

According to Massimo Scolari, "the representation of depth is achieved with so-called parallel perspective, which we prefer to call oblique drawing. In its simplest form, oblique drawing sets two viewpoints side by side, dispenses with shadows, emphasizes outlines, and avoids those gradations of tone that suggest the corporeality of the third dimension." While the geometric operations of producing oblique drawings are at this point incorporated within many modeling software, its necessary labor in postproduction makes it a somewhat undesirable mode of representation in both practice and academy of architecture. However simplistic and impractical this tool may seem, its modest way of describing complex geometric and spatial formations is undeniably one of architecture's most vital representational modes. While mastering the conventions of technical drawings, plans, sections and elevations, this studio will research and assemble the oblique and orthographic projections as means of representation to establish a connection with the history of architecture as well as contributing to its contemporary discourse.

Through these multiple representational modes, students will engage with the notion of activating poché by way of experimenting with thick and thinness. More specifically, we will engage with poché as four major devices: as fill, as material, as threshold and as program. This in turn will help articulate specific idiosyncrasies of inhabitation while investigating the potentials of unconventional thickness, spatially, materially and qualitatively. While general methods of manufacturing dimensional building materials often dictate the architect's design decisions and drive the client's budget, we will only concern our mission with proposing unconventional interventions that challenge these standard preconceptions. The studio will center around a single architectural program, an archive, as a site for organizational innovation. As the age of print-matter is dwindling with digitization of literature, the archive offers many auxiliary possibilities for an architectural disposition.

#### INSTRUCTIONAL PROCESS

Graduate Studio 2 students will participate in lectures, workshops, site visits and studio work to produce proposals for an architectural intervention. The course will operate in multiple modes:

- Lectures and reading discussions: lectures/discussions will take approximately thirty minutes during which time students and instructor will engage in a critical discussion regarding the course subject. Verbal participation is required.
- Pin-ups/desk critiques: students are required to come to class prepared with assigned work ready to present to instructor and classmates. Verbal participation is required.
- Reviews: students are required to present coherent architectural proposals through verbal and graphic means to instructor, jurors and classmates.
- Workshops: specific skills may be presented by instructor through in-class exercises. Students are required to come to class prepared with the appropriate tools (laptop, sketchbook, etc.) in order to participate.
- Studio: the entire duration of studio time will be used for working in class. Students will meet with instructor and classmates to brainstorm and exchange feedback/



Alex Roman / The Third & The Seventh / Shiba Ryótaró's Library / 2010



Jeremy & Samuel Bentham / Panopticon Elevation, Section & Plan / Drawn by Willey Reveley / 1791

ideas for moving their projects forward. This time shall be used for working on assignments for this course only. Students are required to be prepared to present their work at the beginning of each class and to remain in class for the entire duration.

- Drawing/printing: all drawings for this course will be digital. To assure proper feedback on iteration of a given assignment students are required to print the latest version of their work for every class session.
- Models/materials: working through physical model making is a vital component of this studio. Physical model making is required. Students must be shop certified by the second week of the semester.
- Software: students are required to use the following software throughout the semester: latest release of Rhino, Adobe Illustrator, Adobe InDesign, Adobe Photoshop and Grasshopper.
- Digital Submission: students are required to submit PDF files of their work for every review and assignment via Moodle. Each submission must consist of a single PDF containing all presented materials.

#### TECHNIQUE

As a core studio in the graduate program this course will cover a series of fundamental skill-building techniques. Students will be expected to engage with the following modes of production:

- Digital Modeling: precise formation of three-dimensional objects in a digital environment, primarily Rhino6.
- Two-dimensional Drawing and Rendering: precise description of three-dimensional objects on a two-dimensional plane in vector and raster using V-Ray, Adobe Illus-trator CC, Adobe Photoshop CC and Adobe InDesign CC.
- Physical Modeling: precise description of three-dimensional objects in real space using analog model making, 3D printing, laser cutting and CNC Milling.

#### COURSE BIBLIOGRAPHY

Specific required readings from the following list and other sources will be assigned on Moodle throughout the semester; students are encouraged to use the complete list for more in-depth research. Copies of books in possession of the library will be held on reserve under the name of this course. List is subject to modification during the semester.

- Abell, John and Carnegie, Teena. "Information, Architecture, and Hybridity: The Changing Discourse of the Public Library." 2009.
- Allen, Stan. "Mapping the Unmappable: On Notation."
- Allen, Stan. "Mat Urbanism: The Thick 2-D."
- Allen, Stan. "Matters of Surface." 2011
- Bachelard, Gaston. "The Poetics of Space." 1958.
- Bernard Tschumi. "Spaces and Events", in Architecture and Disjunction (Cambridge, MA. 1994) pp. 139-150.
- Bourdieu, Pierre. "Algeria 1960."
- Colin Rowe & Robert Slutzky. "Transparency: Literal and Phenomenal", in The Light Construction Reader (New York, NY. The Monacelli Press, 2002) pp. 91-102.
- Eisenman, Peter. "Diagram: An Original Scene of Writing." 1999.
- Evans, Robins. "The Projective Cast: Architecture and It's Three Geometries." 1995.
- Kruszewski, Tomasz. "The Symbolic Motifs in Contemporary Architecture of librar-

ies." 2012.

- Evans, Robins. "Drawn Stone", in The Projective Cast: Architecture and Its Three Geometries (Cambridge, MA. The MIT Press, 1995) pp. 179-240.
- Ghosh, Sudipto. "Poche Parisienne: The Interior Urbanity of Nineteenth Century Paris", 89th ACSA Annual Meeting. Baltimore, MD. 2001.
- Hopper J. Leonard. "Landscape Architectural Graphic Standards."
- Pauly, Daniele. "The Chapel at Ronchamp." 1997.
- Rudofsky, Bernard. "Architecture without architects, an introduction to nonpedigreed architecture." The Museum of Modern Art: Distributed by Doubleday, Garden City, N.Y., 1964.
- Scolari, Massimo. Oblique Drawing: A History of Anti-Perspective." 2012.
- Vidler, Anthony. "Diagrams of Diagrams: Architectural Abstraction and Modern Representation." 2000.
- Young, Michael. "Digital Remediation." 2012.

## EVALUATION OF STUDENT WORK

Each assignment will be evaluated based on the students' successful completion of the course learning outcomes. Following every review, each student will receive a rubric with the following evaluation criteria:

25%_Formal: level of geometric control, formal development, clarity of representation, and understanding of two and three-dimensional relationships.

25%_Technical: level of precision in two and three dimensions including digital modeling, drawing, and physical model construction. Critical/clear use of scale, line-weight, line-type, color and material.

25%_Conceptual: articulation of ideas, critical thinking, conceptual drive and general intent in each phase of project development.

25%_Professional: attendance, completion of assignments for each class period. Strong participation in class discussions, reviews and general respect toward colleagues and instructors.

#### FINAL GRADE CALCULATION

Review 1: 25% Review 2: 25% Review 3: 25% Review 4: 25%

#### INSTRUCTIONAL SEQUENCE

This studio will be executed through four major phases while developing a single architectural project. Each phase builds upon the previous, therefore successful completion of the semester will hinge upon the successful completion of each phase.

#### Phase 1 / Analytical Examination / 4 Weeks

This phase will focus on translating fieldwork survey, research and precedent analysis into a generative system of operations. Students will develop critical design thinking through establishing an investigational rhythm through writing, analytical drawings, diagrams, models and collage processes.

#### Phase 2 / Formal + Conceptual Initiative / 4 Weeks

This phase will test the spatial potentials of phase 1 by first establishing a lexicon of appropriate vocabulary that can lead architectural resolutions. The phase will then ex-



Giuseppe Galli Bibiena / Half Elevation & Half Section of Catafalque for a Duchess of Hanover / 1696-1756

amine the relationships between interior and exterior programmatic and spatial conditions. Additionally, this phase will serve to generate ideas by deploying critical thinking and writing that contributes to the architectural discourse.

#### Phase 3 / Contextual Response / 4 Weeks

This phase will address the study and documentation of a project site that leads the placement and composition of each overall mass within a given context. Students will strategize coherent responses to site conditions while proposing precise programmatic moves in order to build a comprehensive design argument.

#### Phase 4 / Intervention Proposal / 4 Weeks

This phase will be dedicated to the solidification of an argument and proposal in response to prompts provided in the course description. Students will finalize their proposals by relating their research, analysis and experiments to historical and contemporary works of architecture that engage similar subjects as well as applying newly learned technical skills to all two and three-dimensional representational elements.

#### SCHEDULE AND DELIVERABLES

Week 4: Review 1 Week 8: Review 2 Week 12: Review 3 Week 16: Review 4

*Detailed Schedule Attached

#### ASSIGNMENTS AND ASSESSMENT

Detailed assignments and corresponding readings will be issued throughout the course.

*Assessment Criteria Attached

#### ESTIMATE OF COSTS

It is estimated that each student will spend approximately \$700 on materials, printing, fabrication costs. Other fees such as transportation and travel accommodations may apply for attending field trips throughout the semester.

#### ATTENDANCE, PARTICIPATION AND SUBMISSION POLICY

Students are expected to be on time and present for the entire duration of every class. Each class builds upon the previous one; missing a class will likely lead to falling behind. Arriving to class late or leaving early counts as an absence. Absence, tardiness and lack of participation in class will be directly reflected in your grade for rigor and completion. (2) absences will result in a "0" for the "Professional" category during the project in which it occurs. (3) or more absences will result in a letter grade deduction for the overall course.

Students are required to attend and participate at critiques, pin-ups and reviews for their full duration. For reviews, work must be pinned up at the designated time and no less than 15 minutes before the scheduled deadline. Students who have not pinned up 15 minutes prior to the deadline will receive a letter grade deduction in the category of "Professional" and will not be permitted to present on the day of review. Students must remain at the review for the presentations of the entire class. Failure to remain present will result in a letter grade deduction in the category of "Professional." Students who fail to attend a review will receive a grade of "0" for the Category of "Professional."



Le Corbusier / Notre-Dame-du-Haut at Ronchamp / 1954

#### MOODLE POLICY

Students are expected to submit all assigned work via Moodle for grading and archiving purposes. Assignments not submitted to Moodle are subject to receive a failing grade.

#### DEPARTMENT POLICIES AND PROCEDURES

#### Requirements for Documentation and Archiving

Every student is responsible for digitally archiving their work. An assignment that has not been digitally archived will be considered incomplete and will not receive credit. Please use the process provided by your instructor to produce a single PDF document for each assignment. Failure to submit the required documentation in usable format may result in a grade reduction in the final grade of the semester. Documentation of the studio work is essential for the NAAB accreditation process and assessment of the architecture program.

The university reserves the right to retain student work for archival purposes. Projects/models, assignments, and exams will be kept at the department's discretion for this purpose. Students will be asked to help with archiving their projects at the end of the semester.

#### Writing Requirements

All written work must meet the standards for English. Poorly written papers may be returned without a grade for revision and resubmission, and may be subject to grade reduction. Students are encouraged to utilize the Woodbury Writing Center.

#### Studio Culture

The studio environment is an essential component in learning to become an architect. One goal of the School of Architecture is to create a vibrant, exploratory, safe and respectful learning culture for students. Only through respect between faculty and students, as well as students among themselves, can a healthy educational studio culture be fostered. Students are required to uphold high standards of behavior and academic discipline while in the studio. See the full Studio Guidelines and Studio Culture Policy for more information.

#### School Policy on Social Equity and Diversity

Our mission is to provide an environment where people can learn, teach and work with a shared sense of purpose, core values and respect without bias towards individual beliefs, values and areas of difference. We do this in an effort to create a community that respects and values the full and equal inclusion of its members. Our goal is to provide an environment that is welcoming and inclusive of all.

#### Accommodations for students with identified disabilities

Woodbury University is committed to making reasonable accommodations to assist individuals with disabilities in reaching their academic potential. Students desiring accommodations due to a physical, learning or psychological disability must first complete an Accommodations Request Form, which can be downloaded from http://go.woodbury.edu, and found under "Academic Resources." Accommodations cannot be granted prior to the instructor's receipt of a Notification of Special Needs Release Form from the Disabilities Coordinator. Accommodations are never provided retroactively. (For more information, contact the Disabilities Coordinator in the Whitten Center (818) 394-3345.)

#### Academic Honesty

Because the integrity of the academic enterprise of any institution of higher education requires honesty in scholarship and research, academic honesty is required at Woodbury University. Academic integrity is important for two reasons: first, independent and original scholarship ensures that students and scholars derive the most from their educational experience and the pursuit of knowledge. Second, academic dishonesty violates the most fundamental values of a community of scholars and depreciates the achievements of the entire University community. Accordingly, Woodbury University views academic dishonesty as one of the most serious offenses that a member of our community can commit. Adherence to the Academic Honesty Policy reflects the commitment of our community to the ideals of learning, research, and scholarship. See Catalog for the entire Academic Honesty Policy.

#### Grade Requirements

Refer to the Woodbury University catalog for grading standards and policies.

#### Environmental Responsibility

Studio projects shall be designed in a socially and environmentally responsible manner. All projects should reduce dependencies on non-renewable resources.

#### **Class Attendance**

It is mandatory that students take advantage of all scheduled course time. Regular attendance at EVERY class is expected throughout the duration of the class/studio time. Arrival at the beginning of the class period is required. Lateness or early departure will be considered as an absence. Regular and prompt attendance at all university classes is required. The instructor is not obligated to assign extra work or to prepare additional examinations for classes missed. It is understood that when 15% of the class time has been missed, the student's absence rate is excessive. Each instructor will announce his/her attendance policy in the course syllabus.

#### Excused Absence

Students should report any illness or emergency to their course instructor, preferably before missing the class, by emailing the instructor. Written documentation (doctor's note, etc.) is required for an excused absence, and should be submitted to the instructor at the next class meeting. Extended absence due to medical issues, family issues, etc. should be reported to the Dean of Students' office for appropriate documentation.

Students who anticipate absence due to religious observance or similar commitments should speak with their instructor at the start of the term to review all dates in question and develop a plan to meet all course requirements.

#### Email

Students are advised to meet with their instructors during posted office hours. Face-to-face communication in discussing and resolving problems is preferable to email exchanges. Additionally, meetings must be scheduled in advance using email correspondence. Email correspondence must be written in a respectful and professional manner. It is the student's responsibility to consistently check for email.

#### Grievance Protocol

Students should use the following protocol for questions, grievances, or general concerns about coursework and the studio environment. Health and safety concerns and emergencies should immediately be directed to campus security (818-252-5208). Academic concerns should be directed first to the student's instructor, and then to the studio coordinator as appropriate. If further consultation is required, the student is advised to meet with the Coordinator and/or the Department Chair.

#### Class Syllabus and Structure

While every effort will be made to follow the outline of the published syllabus, course structure and calendar may be changed at the instructor or coordinator's discretion. Announcements will be made if such changes occur. Students who miss class are responsible for tracking any such announcements.

#### Calculation Of Grade

Letter grades are converted to numeric values using the following values:

Letter	GPA	%	Definition
A	4.00-3.84	96-100	Student learning and accomplishment far exceeds published objectives for the course/test/assignment and student work is distinguished consistently by is high level of competency and/or innovation.
A-	3.83-3.50	92-95	
8+	3.49-3.17	88-91	Student learning and accomplishment goes beyond what is expected in the published objectives for the course/test/assignment and student work is frequently characterized by its special depth of understanding, development, and/or innovative experimentation.
в	3.16-2.84	84-87	
8-	2.83-2.50	80-83	Students learning and accomplishment meets all published objectives for the coursertestiessignment and the student work demonstrates the expected level of understanding, and application of concepts introduced.
C+	2.49-2.17	76-79	
с	2.16-1.84	72-75	
¢-	1.83-1.50	68-71	Student learning and accomplishment based on the published objectives for the course/test/assignment were met with minimum passing achievement.
D+	1.49-1.17	64-67	
D	1.16-0.60	60-63	
F	0.00-0.60	< 60	Student learning and accomplishment based on the published objectives for the courseites/essignment were not sufficiently eddressed nor met.

# Woodbury University School of Architecture Graduate Design Studio 4: The Total Building ARCH 589

Semester:Spring 2020Time:Tuesday/Friday 1:15-6:15 PMLocation:TBDInstructor(s):Linda TaalmanOffice Hours:Monday 1-4pm

## **Catalog Description**

Credits 6.00. Students are challenged to synthesize architectural considerations, from the conceptual to the tangible, in the comprehensive design of a building. The studio project grows from a strong theoretical base into a response to the complexities of program and site. Accessibility, environmental performance, and life safety are addressed. Emphasis is placed on the integration of building systems with envelope and structure. Material selection is guided by both climate and context and is sensitive to resource conservation. Prerequisites: Graduate Studio 3

## Learning Outcomes

Upon completion of this course, it is expected that students will be able to:

- Develop a comprehensive design proposal, integrating clear formal and spatial architectural solutions that respond to site and climate, accessibility, and present a fully integrated approach to systems
- Emphasize the design of an architecture through assemblies of materials and systems
- Make connections between building composition, assembly, manufacturing, fabrication and representation
- Design a construct fully articulate of human activity and code compliance, of component parts and whole, and human control and resource management
- Integrate the multitude of systems into the proposed architecture required today to create sustainable building solutions

## NAAB Student Performance Criteria

## A.4 Architectural Design Skills

Ability to effectively use basic formal, organizational and environmental principles and the capacity of each to inform two- and three-dimensional design.

## A.5 Ordering Systems

Ability to apply the fundamentals of both natural and formal ordering systems and the capacity of each to inform two- and three-dimensional design.

## **B.2 Site Design**

Ability to respond to site characteristics including urban context and developmental patterning, historical fabric, soil, topography, climate, building orientation, and watershed in the development of a project design.

## **B.3 Codes and Regulations**

Ability to design sites, facilities and systems consistent with the principles of lifesafety standards, accessibility standards, and other codes and regulations.

## **B.4 Technical Documentation**

Ability to make technically clear drawings, prepare outline specifications, and construct models illustrating and identifying the assembly of materials, systems, and components appropriate for a building design.

## **B.6 Environmental Systems**

Understanding the principles of environmental systems' design, how systems can vary by geographic region, and the tools used for performance assessment. This must include active and passive heating and cooling, indoor air quality, solar systems, lighting systems, and acoustics.

## **B.7 Building Envelope Systems and Assemblies**

Understanding of the basic principles involved in the appropriate selection and application of building envelope systems relative to fundamental performance, aesthetics, moisture transfer, durability, and energy and material resources.

## **B.8 Building Materials and Assemblies**

Understanding of the basic principles utilized in the appropriate selection of interior and exterior construction materials, finishes, products, components and assemblies based on their inherent performance including environmental impact and reuse.

## **B.9 Building Service Systems**

Understanding of the basic principles and appropriate application and performance of building service systems including mechanical, plumbing, electrical, communication, vertical transportation security, and fire protection systems.

## **B.10 Financial Considerations**

Understanding of the fundamentals of building costs, which must include project financing methods and feasibility, construction cost estimating, construction scheduling, operational costs, and life-cycle costs.

## C.2 Integrative Evaluation and Decision-Making Design Process

Ability to demonstrate the skills associated with making integrated decisions across multiple systems and variables in the completion of a design project. This demonstration includes problem identification, setting evaluative criteria, analyzing solutions, and predicting the effectiveness of implementation.

## C.3 Integrative Design

Ability to make design decisions within a complex architectural project while demonstrating broad integration and consideration of environmental stewardship, technical documentation, accessibility, site conditions, life safety, environmental systems, structural systems, and building envelope systems and assemblies.

## **Course Description**

**HOME NOW**: The 2020 Comprehensive design studio takes on several specific challenges facing us now, the greatest being climate change and the impact that buildings have on their environment and the housing crisis and the ability for architects to provide solutions for the 100% not the 1%. Within this context, the comprehensive studio places particular emphasis on how to design and integrate technology and building systems within our building envelope, with the goal of creating spaces that are highly tuned to their climate, context and social needs. We will question the idea of home and domestic space and redefine how our individual spaces can make a positive impact on our shared communities.

2020 is the year that California implements the first net zero energy code requirement at the residential scale, with the plan that by 2030 all buildings in California will be net zero. What this means is that our living spaces, many of which are planned piece by piece by the individual inhabitant, will lead the way towards a sustainable architecture that integrates energy performance with envelope efficiency at the highest level. Dwelling spaces have always played a critical role in the history of architecture, and particularly in California, with architects pioneering new technologies, materials and systems through the most essential space of the home. We will question both the idea of home and the role technology can play in defining how we live and how we build our spaces.

2020 is also a time of crisis for housing globally, and locally within the context of California which is facing a staggering number of homeless and a total lack of affordable housing at the rural, suburban and urban scale. We need fresh solutions. How can architects be a part of the future solutions for our residential spaces at all scales? We will rethink the idea of the house from the inhabitants needs as a 21st century citizen, what is the purpose of our home today? What is the definition of family, neighborhood, community? How do we want to live in the future?

## Micro-housing

We will use the micro unit as a catalyst for big change. Starting with a single unit and the scale of the inhabitant the studio will innovate solutions for living, energy usage and generation, and material and resource management. The unit will then be tested at a variety of scales- the rural, the suburban and the urban- and combinations- the single unit, the double and the multi.

## Material Research and Prefabrication/Construction

Materials and methods of construction will be questioned as we strive to present new environmental responsible and economical solutions for making space. One of the biggest inhibitors to housing is cost, and this studio strives to provide detailed solutions that are mindful of their environmental and economic feasibility. The studio will research methods of prefabrication, off site fabrication, and construction as a part of this questioning.

As part of the studio rubric we will take on the ACSA 2020 Housing Competition HERE & NOW: A House for the 21st Century. And students will be expected to submit their projects to the competition at the end of the semester.

The studio explores the potential for architects to innovate within a highly defined building envelope. Students will develop designs for micro housing within the context of the Los Angeles region. The studio encourages architecture that retains its own identity while integrating and filtering its environment. There will be an integral focus on passive design and the interface between construction systems developed and environmental systems required for the functionality of the program and achieving net zero energy. Through the course of the semester, the students will develop the projects through a rigorous methodology of drawings, diagramming and modelling arriving at a highly detailed comprehensive building.

## Schedule and Deliverables

Part 1: Design and Material Research for a Micro Unit: Historical Precedents, Material Research and Defining the Home Space- due January 28 Part 2: Concept Design for a Prefabricated Micro Unit- due February 11 Part 3: Building Systems Design – due March 7 Part 4: Building Development and Site Integration: Case studies for implementing design and selected systems and materials- due May 1

Assignments and Schedule subject to change or modification throughout the semester. Lectures, guests and field trips will be announced.

## Final Grade Calculation

15%- Part 1: Design and Material Research
15%- Part 2: Concept Design
20%- Part 3: Building Systems Design (Midterm Presentation)
30%- Part 4: Building Development and Site Integration
10%- Final Presentation
10%- Attendance and Participation

## Assignments and Assessment

Students will work through a combination of research & development and design in order to develop highly detailed and inventive building systems with a particular focus on innovative building envelope systems. Students will deploy these systems at a series of scales from small to large. Students will develop detailed drawings and models that they will prototype in digital models, 3d prints and detailed physical models.

Assignments will follow through 4 phases, Research & Development, Concept Design, Systems Design and Building Development and Site Integration. Weekly updates and sub assignments will be given. Students will work primarily as individuals; research may be done in groups.

## Criteria for Evaluation

Each Assignment will be evaluated for two core criteria and specific criteria noted below for each part 1. Clarity in Representation

2. Conceptual Rigor and Development

## Part 1: DESIGN AND MATERIAL RESEARCH due January 28

Activities and Processes: Research of Precedents, Material Research and Defining the Home space through documentation, catalog and interpretation, drawing and digital modeling.

- Students will research the studio topic through a multiprong interpretive lens, critical analysis of precedents, material research, and programmatic research
- This assignment consists of 3 key parts
  - 1.1. Precedent Research
  - 1.2. Material Research
  - 1.3. Programmatic Research
- Assessment/grading criteria used to generate grading rubrics.

Criteria below will be used in a matrix that is aligned with each sub assignment

- Precedent Research, Documentation and Interpretation
- Material Research (NAAB B.8)
- Programmatic Research (NAAB C.2)

## Part 2: CONCEPT DESIGN due February 11

Activities and Processes: Development of Concept Design through physical and digital modeling, drawing both orthographic and axonometric, and 3d visualization.

- Students will conceptually develop their material and program research through the development of the envelope into a unit that integrates concepts for passive design This assignment consists of 2 key parts
  - 2.1. Conceptual development of program as a 3-dimensional space integrating the human scale

2.2. Conceptual envelope design and passive design strategies (daylighting, shading, heat gain, natural ventilation)

Assessment/grading criteria used to generate grading rubrics.

Criteria below will be used in a matrix that is aligned with each sub assignment

- Develops clear Conceptual strategies in response to material and programmatic research (NAAB, A.5)
- Conceptual Building Envelope responds appropriately to design criteria, develops clear passive design strategies for massing and orientation (NAAB B.6, B.7)
- Integrative design approach- integration of multiple strategies in the creation of a holistic design (NAAB C.3)

## Part 3: SYSTEMS DESIGN due March 6

Activities and Processes: Development of Systems Design through physical and digital modeling, drawing both orthographic and axonometric, amd 3d visualization

 Students will develop their project with consideration primary active systems required for maintaining comfort and performance and balancing energy loads- active system and primary building service systems. The physical integration of these systems within the building envelope is the main objective.

This assignment consists of 2 key parts

3.1. Integration of Active Systems for environmental control (heating, cooling, ventilation, lighting)

3.2. Integration of Building Service Systems (energy systems, mechanical, electrical, plumbing, life safety, AV/Security)

Assessment/grading criteria used to generate grading rubrics.

Criteria below will be used in a matrix that is aligned with each sub assignment

- 1) Develops strategies for integrating active systems for environmental control with the conceptual design (NAAB B.6)
- 2) Develops the project through a clear systems design that successfully integrates the primary building service systems with the conceptual building envelope (NAAB B.7, B.9)
- 3) Clear integrative approach and design decision making (NAAB C.2)
- 4) Integrative design approach- integration of multiple strategies in the creation of a holistic design (NAAB C.3)

## Part 4: BUILDING AND SITE DESIGN due April 14

Activities and Processes: Development of Building Design through drawing both orthographic and axonometric, 3d visualization, digital and physical modeling, and detailed drawings

- Students will develop their project into a fully integrated building and site taking into consideration the primary physical and spatial systems of architecture and enclosure along with the dynamic systems of environmental control, energy, water and resource management
  - 4.1: Site Integration strategies for implementing micro units on multiple sites at multiple scales, massing and orientation in response to site
  - 4.2. Networked Systems- strategies for integrating and interconnecting with the larger site

- 4.3. Dynamic Systems and responsive architecture
- 4.3. Final material strategies and feasibility, details and specifications
- Assessment/grading criteria used to generate grading rubrics.

Criteria below will be used in a matrix that is aligned with each sub assignment

- 1) Develops strategies for responding to dynamic forces of time, season and climate and availability of resources
- 2) Develops the project through clear drawings that describe a developed building design successfully integrating all the systems into an architectural project
- Project successfully demonstrates ability to apply local codes and regulations in the building design and the development of plans, sections and elevations and selection of the appropriate building systems (NAAB B.3)
- 4) Detailed technical documentation of the project through technical drawings, specifications and feasibility projections (NAAB B.4, B.10)

## Final Presentation: TBD

Activities and Processes: Development of Building Design through drawing both orthographic and axonometric, 3d visualization, digital and physical modeling, and detailed drawings

- The final presentation compiles and presents the work of the semester alongside a culminating large-scale model. A final model of the proposed project demonstrates the comprehensive qualities of the project and is intended to articulate the interrelationships between the site and building and the integration of primary and detailed building systems. The final assignment consists of the following parts
- Final Presentation: Assignment 1-4 combined and large-scale sectional model of project
- The final presentation will be a comprehensive evaluation of the work of the entire semester and will be graded on the basis of all Learning Outcomes for this course and NAAB Criteria A.4, A.5, B.2, B.3, B.4, B.6, B.7, B.8, B.9, B.10, C.2, and C.3
- Assessment/grading criteria used to generate grading rubrics.

Criteria below will be used in a matrix that is aligned with each sub assignment

- 1) Develops clear Conceptual strategies in response to site, develops clear passive design strategies of massing, orientation and passive heating and cooling (NAAB A.4, A.5, B.2, C.2)
- 2) Conceptual Building Envelope responds appropriately to site and design criteria, passive design goals (NAAB B.2, B.6, B.7)
- 3) Systems integration of building service systems and active environmental control in the creation of a holistic design (NAAB B.6, B.8, B.9)
- Project successfully demonstrates ability to apply local codes and regulations in the building design and the development of plans, sections and elevations and selection of the appropriate building systems (NAAB B.3)
- 5) Detailed technical documentation of the project through technical drawings (NAAB B.4)
- 6) Clear integrative approach and design decision making (NAAB C.2)
- 7) Develops the project through clear drawings that describe a developed building design successfully integrating all the systems into an architectural project (NAAB C.3)

## Estimate of Costs

Students should expect to expend the necessary resources to produce drafts and final for each assignment. Printing costs are depending upon current pricing and plotting costs established by the university (please see labs) and specific design solutions and material requirements for modeling materials. Estimated printing and model making costs detailed below.

Printing budget: \$500 Model making costs: \$400

There will be field trips during the semester, estimated cost \$100.

## **Attendance Policy**

Students are expected to attend each session of class to not miss key lectures, discussions and feedback. Review of assignments, presentations and critique will be presented during class time. It is not possible to make up missed lectures, discussion or critique. If a presentation is missed the material intended to be presented on that date must be submitted complete to moodle and physically presented at the next class session.

## **Moodle Policy**

Readings and assignments will be posted to moodle. Students are expected to download materials from moodle and be familiar with the material and prepared to discuss these materials in class. Students are responsible for posting all assignments by the assignment due date.

#### DEPARTMENT POLICIES AND PROCEDURES

#### **Requirements for Documentation and Archiving**

Every student is responsible for digitally archiving their work. An assignment that has not been digitally archived will be considered incomplete and will not receive credit. Please use the process provided by your instructor to produce a single PDF document for each assignment. Failure to submit the required documentation in usable format may result in a grade reduction in the final grade of the semester. Documentation of the studio work is essential for the NAAB accreditation process and assessment of the architecture program.

The university reserves the right to retain student work for archival purposes. Projects/models, assignments, and exams will be kept at the department's discretion for this purpose. Students will be asked to help with archiving their projects at the end of the semester.

#### Writing Requirements

All written work must meet the standards for English. Poorly written papers may be returned without a grade for revision and resubmission, and may be subject to grade reduction. Students are encouraged to utilize the Woodbury Writing Center.

#### **Studio Culture**

The studio environment is an essential component in learning to become an architect. One goal of the School of Architecture is to create a vibrant, exploratory, safe and respectful learning culture for students. Only through respect between faculty and students, as well as students among themselves, can a healthy educational studio culture be fostered. Students are required to uphold high standards of behavior and academic discipline while in the studio. See the full Studio Guidelines and Studio Culture Policy for more information.

#### School Policy on Social Equity and Diversity

Our mission is to provide an environment where people can learn, teach and work with a shared sense of purpose, core values and respect without bias towards individual beliefs, values and areas of difference. We do this in an effort to create a community that respects and values the full and equal inclusion of its members. Our goal is to provide an environment that is welcoming and inclusive of all.

#### Accommodations for students with identified disabilities

Woodbury University is committed to making reasonable accommodations to assist individuals with disabilities in reaching their academic potential. Students desiring accommodations due to a physical, learning or psychological disability must first complete an Accommodations Request Form, which can be downloaded from http://go.woodbury.edu, and found under "Academic Resources." Accommodations cannot be granted prior to the instructor's receipt of a Notification of Special Needs Release Form from the Disabilities Coordinator. Accommodations are never provided retroactively. (For more information, contact the Disabilities Coordinator in the Whitten Center (818) 394-3345.)

#### Academic Honesty

Because the integrity of the academic enterprise of any institution of higher education requires honesty in scholarship and research, academic honesty is required at Woodbury University. Academic integrity is important for two reasons: first, independent and original scholarship ensures that students and scholars derive the most from their educational experience and the pursuit of knowledge. Second, academic dishonesty violates the most fundamental values of a community of scholars and depreciates the achievements of the entire University community. Accordingly, Woodbury University views academic dishonesty as one of the most serious offenses that a member of our community can commit. Adherence to the Academic Honesty Policy reflects the commitment of our community to the ideals of learning, research, and scholarship. See Catalog for the entire Academic Honesty Policy.

#### Grade Requirements

Refer to the Woodbury University catalog for grading standards and policies.

#### Environmental Responsibility

Studio projects shall be designed in a socially and environmentally responsible manner. All projects should reduce dependencies on non-renewable resources.

#### **Class Attendance**

It is mandatory that students take advantage of all scheduled course time. Regular attendance at EVERY class is expected throughout the duration of the class/studio time. Arrival at the beginning of the class period is required. Lateness or early departure will be considered as an absence. Regular and prompt attendance at all university classes is required. The instructor is not obligated to assign extra work or to prepare additional examinations for classes missed. It is understood that when 15% of the class time has been missed, the student's absence rate is excessive. Each instructor will announce his/her attendance policy in the course syllabus.

#### **Excused Absence**

Students should report any illness or emergency to their course instructor, preferably before missing the class, by emailing the instructor. Written documentation (doctor's note, etc.) is required for an excused absence, and should be submitted to the instructor at the next class meeting. Extended absence due to medical issues, family issues, etc. should be reported to the Dean of Students' office for appropriate documentation.

Students who anticipate absence due to religious observance or similar commitments should speak with their instructor at the start of the term to review all dates in question and develop a plan to meet all course requirements.

#### Email

Students are advised to meet with their instructors during posted office hours. Face-to-face communication in discussing and resolving problems is preferable to email exchanges. Additionally, meetings must be scheduled in advance using email correspondence. Email correspondence must be written in a respectful and professional manner. It is the student's responsibility to consistently check for email.

#### **Grievance Protocol**

Students should use the following protocol for questions, grievances, or general concerns about coursework and the studio environment. Health and safety concerns and emergencies should immediately be directed to campus security (818-252-5208). Academic concerns should be directed first to the student's instructor, and then to the studio coordinator as appropriate. If further consultation is required, the student is advised to meet with the Coordinator and/or the Department Chair.

#### **Class Syllabus and Structure**

While every effort will be made to follow the outline of the published syllabus, course structure and calendar may be changed at the instructor or coordinator's discretion. Announcements will be made if such changes occur. Students who miss class are responsible for tracking any such announcements.

## Calculation Of Grade

Letter grades are converted to numeric values using the following values:

Letter	GPA	%	Definition
A	4.00-3.84	96-100	Student learning and accomplishment far exceeds published objectives for the course/test/assignment and student work is distinguished
A-	3.83-3.50	92-95	consistently by is high level of competency and/or innovation.
B+	3.49-3.17	88-91	Student learning and accomplishment goes beyond what is expected in the published objectives for the course/test/assignment and student work is frequently characterized by its special depth of understanding, development, and/or innovative experimentation.
В	3.16-2.84	84-87	
В-	2.83-2.50	80-83	Students learning and accomplishment meets all published objectives for the course/test/assignment and the student work demonstrates the expected level of understanding, and application of concepts introduced.
C+	2.49-2.17	76-79	
С	2.16-1.84	72-75	
C-	1.83-1.50	68-71	Student learning and accomplishment based on the published objectives for the course/test/assignment were met with minimum
D+	1.49-1.17	64-67	passing achievement.
D	1.16-0.60	60-63	
F	0.00-0.60	< 60	Student learning and accomplishment based on the published objectives for the course/test/assignment were not sufficiently addressed nor met.

**Syllabi** A.9 Historical Traditions & Global Culture (M. Arch)

# Woodbury University School of Architecture ARCH 554 Criticism 1: Architectural History 1

Semester:	Fall 2020
Day/Time:	Lecture (asynchronous) Monday 1:15-2:30
	Discussion (synchronous) Wednesday 1:15-2:30
Location:	Online via RingCentral Meetings
Instructor:	Ewan Branda   ewan.branda@woodbury.edu
	Asynchronous lectures by Jon Linton   jon.linton@woodbury.edu
Office Hours:	Monday 1:15-2:30, or by appointment

## **Catalog Description**

Survey of history and theory of architecture and design spanning a chronological period from pre-history to the nineteenth century in Western and non-Western societies. This course traces history with a process of focused explorations into diverse cultures, geographies, and places that examines many layers of historical time. When considered together, these explorations contribute to an understanding of architecture as a deeply bound discipline with components ranging from the artifacts of everyday life and ritual, to building traditions and practices, to the larger forces of geography and the design of entire cities. 3 Unit Lecture.

## Learning Outcomes

## NAAB Criteria:

PC.2 Design: How the program instills in students the role of the design process in shaping the built environment and conveys the methods by which design processes integrate multiple factors, in different settings and scales of development, from buildings to cities.

Learning Outcome: Use diagrams and other graphic conventions as a tool for analysis of precedents from the urban scale to the building scale, and addressing parameters from climate, use, relationship to site, and building form and organization.

PC.3 Ecological Knowledge and Responsibility: How the program instills in students a holistic understanding of the dynamic between built and natural environments, enabling future architects to mitigate climate change responsibly by leveraging ecological, advanced building performance, adaptation, and resilience principles in their work and advocacy activities.

*Learning Outcome: Evaluation of basic ecological principles and architects' responsibilities with respect to environmental and resource conservation in architecture and urban design* 

PC.4 History and Theory: How the program ensures that students understand the histories and theories of architecture and urbanism, framed by diverse social, cultural, economic, and political forces, nationally and globally.

Learning Outcome: Describe and discuss traditions of architecture, landscape and urban design including examples of indigenous, vernacular, local, regional, national and global settings in terms of their climatic, ecological, technological, socioeconomic, public health, and cultural factors.

PC.8 Social Equity and Inclusion: How the program furthers and deepens students' understanding of diverse cultural and social contexts and helps them translate that understanding into built environments that equitably support and include people of different backgrounds, resources, and abilities.

Learning Outcome: Illustrate research of the ethical issues involved in the formation of professional judgment regarding social, political and cultural issues in architectural design and practice.

## **Course Description**

Criticism 1 is a combined lecture and discussion course. The first class of each week consists of an image-based lecture that will be delivered asynchronously; the second class of each week consists of discussion (covering reading and research assignments, themes, terms, and ideas), student presentations, tutorials, in-class diagramming assignments, and review sessions. Attendance is mandatory online at the discussion sessions. Participation in discussion sessions will be calculated as part of your grade. Students are required to have their camera turned on for the entire class session to be counted as present according to the ONLINE COURSE DELIVERY POLICIES AND GUIDELINES below. Turning off your web cam momentarily is acceptable, but you should keep in mind that it is equivalent to leaving the classroom in the physical world. Please speak to your instructor if you are in a situation that prevents you from using your web cam.

## **Schedule and Deliverables**

See Course Schedule below. This syllabus is subject to change and/or revision during the academic term, allowing the instructor to make minor changes to the syllabus such as due dates, assignments, etc. as appropriate.

## **Final Grade Calculation**

There are several methods through which the instructor will assess student performance as outlined below. Students shall be evaluated on those elements described in Assignments & Examinations above. Students must complete all required work to pass this course. Required coursework elements and assignments for assessment and their respective percentage of the final grade are:

Attendance & Participation	10%
Sketchbook (compiled)	30%
Diagramming Exercises	15%
Three Folios (each folio = 15%)	45%

## Assignments and Assessment

Detailed assignment requirements will be reviewed in class and provided on Moodle.

## 1. Sketchbook

Weekly submission of scanned hand-drawn and hand-labelled/annotated sketches taken from readings and lectures, and submission of compiled weekly sketches at end of semester. See the *Sample Sketch Page* on Moodle for recommended sketchbook page format. Be prepared to discuss sketches during class.

Sketches with notes should:

- Be carefully constructed;
- Identify and analyze how common themes from readings/lectures are expressed through formal characteristics (e.g., composition and ordering systems, spatial character, structure, enclosure, use, materiality, light/shadow, symbolism, response to urban or site conditions, etc.); and
- Identify and compare formal characteristics to understand similarities and differences between works and/or between urban sites.

Weekly sketchbook submissions and the compiled sketchbook will be evaluated based on these criteria:

- Drawing craft, clarity, shading, proportion, linework;
- Relevance and coherence of annotations;
- Awareness of how buildings, building complexes, and sites articulate and support social and cultural ideas and practices.

*Learning outcomes delivered: Visual Communication Skills, Historical Traditions and Global Culture. NAAB criteria delivered: PC.2 Design, PC.3 Ecological Knowledge and Responsibility, PC.4 History and Theory.* 

## 2. Diagramming Exercises

This in-class, discussion-session activity involves identification of the conceptual, formal, and environmental aspects of a specific architectural or urban work from the week's reading and/or lecture using an assigned diagramming method through a specific method of diagramming that you will be given. This work will take place during the discussion section each week.

Exercises will be evaluated according to the following criteria:

- Diagrams take a critical, interpretive approach to the case study;
- Presentation/discussion clearly articulates an intention and approach;
- Drawing craft, clarity, shading, proportion, linework.

Learning outcomes delivered: Communication Skills, Historical Traditions and Global Culture. NAAB criteria delivered: PC.2 Design, PC.3 Ecological Knowledge and Responsibility, PC.4 History and Theory, and PC.8 Social Equity and Inclusion.

## 3. Research Folios

This semester-long project involves documentation and analysis of the architectural/urban form and meaning of historical works through an open-ended graphic interrogation. Using investigative, interpretive, and conceptual methodologies in three stages [*Folio 1: Investigation; Folio 2: Interpretation;* and *Folio 3: Invention*], you will research a specific work or site, analyze its form, setting, and use through graphic analysis, and develop alternative representations that position it within a critical framework. An important aspect of Three Folios—like the sketchbook assignment—is the relationship between graphic analysis and written description and annotation.

Folios will be evaluated according to the following criteria:

- Drawing craft, clarity, shading, proportion, linework
- Relevance and coherence of annotations
- Ability to gather, assess, record, and evaluate information and support conclusions
- Ability to examine, comprehend, and select appropriate precedent principles.
- Ability to demonstrate an understanding of histories and cultural norms of varied contexts and factors.

Learning outcomes delivered: Visual Communication Skills, Investigative Skills, Use of Precedents, Historical Traditions and Global Culture. NAAB criteria delivered: PC.2 Design, PC.3 Ecological Knowledge and Responsibility, PC.4 History and Theory, and PC.8 Social Equity and Inclusion.

## Submitting Late Work

Work submitted later than 10 minutes after the deadline will be penalized one letter grade, and one additional letter grade for each 24 hours after that. *Confirm deadlines and submission cut off on Moodle.* 

## **Visual Content**

In the context of a comprehensive survey of architectural history, visual material presented in this course may include representations of partially or fully unclothed human anatomy. Students uncomfortable with this content are encouraged to individually inform the instructor so that alternate study materials may be provided.

#### **Estimate of Costs**

**REQUIRED TEXTBOOK:** 

*World Architecture: A Cross-Cultural History*, 2nd Edition, Richard Ingersoll, Oxford University Press, New York (2018) (ISBN-13: 978-0190646455; ISBN-10: 0190646454):

https://www.amazon.com/World-Architecture-Cross-Cultural-Richard-Ingersoll/dp/0190646454; Rent: \$33.98; Buy Used: \$87.40; Buy New: \$103.83.

#### SKETCHBOOK & DRAWING TOOLS:

[Recommended selections shown. Alternative comparable items are available; confirm with instructor if uncertain.]

Conda Hardbound Sketchpad, black, wirebound, 80 pages, 8.5x11 [wire binding allows easier scanning]: https://www.amazon.com/CONDA-Spiral-Sketchbook-Drawing-Painting/dp/B01M7NF76G/ref=sr 1 13?dchild=1&keywords=Black%2BWirebound%2BSketchbook%2Bby%2BArtist%27s%2BLof t&qid=1597166304&s=books&sr=1-13-catcorr&th=1; \$11.39 + chipping (Prime: free chipping)

\$11.39 + shipping (Prime: free shipping).

## Watson-Guptill Hardbound Sketchbook, black, stitch bound, 176 pages, 8.5x11:

https://www.amazon.com/Large-Sketchbook-Watson-Guptill-Sketchbooks/dp/0823005194/ref=sr_1_1?keywords=black+hardbound+sketchbook+8.5x11&qid=1566154205&s=books&sr=1-1;

\$10.79 + shipping.

#### Uni-ball Vision Rollerball Pens, Micro Point (0.5mm), Black, 12 Count:

<u>https://www.amazon.com/uni-ball-Vision-Rollerball-Micro-</u> <u>Point/dp/B00006IE8H/ref=sr_1_1?dchild=1&keywords=Black+Uniball+Vision+Micro&qid=1597167435&s=books&sr=1-1;</u> 17.44 + shipping.

## Uni-ball Vision Rollerball Pens, Fine Point (0.7mm), Black, 12 Count:

<u>https://www.amazon.com/uni-ball-Vision-Rollerball-Point-0-</u> <u>7mm/dp/B00006IE8J/ref=sr_1_3?dchild=1&keywords=Black+Uniball+Vision+Micro&qid=1597167435&s=books&sr=1-3;</u> \$18.48 + shipping.

Koh-i-Noor Mechanical Hardtmuth Lead Holder with 5.6mm x 80mm Lead, Black with Clip (5311CN1005PK): https://www.amazon.com/Koh-i-Noor-Mechanical-Hardtmuth-Holder-5311CN1005PK/dp/B009PKK8B2/ref=sr 1 4?crid=3M6SH0T5H3B46&dchild=1&keywords=artists+lead+holder&qid=159716865 8&sprefix=artists+lead%2Caps%2C210&sr=8-4;

\$16.77.

#### Koh-I-Noor 6 Gioconda 5.6 mm Graphite Leads. 4865/2B:

https://www.amazon.com/Koh-I-Noor-Gioconda-Graphite-Leads-4865/dp/B000XABSSA/ref=pd bxgy img 2/139-7395754-5056641?_encoding=UTF8&pd_rd_i=B000XABSSA&pd_rd_r=5c4b8c83-836a-4a87-919d-95a17fde2282&pd_rd_w=HukrU&pd_rd_wg=cA1RZ&pf_rd_p=ce6c479b-ef53-49a6-845bbbbf35c28dd3&pf_rd_r=NBPSBX8Z8TX66T1P7S28&psc=1&refRID=NBPSBX8Z8TX66T1P7S28; \$10.50 + shipping.

Plastic Straightedge Rulers (Clear, 6 in. & 12 in.):

https://www.amazon.com/Inches-Plastic-Straight-Measuring-Student/dp/B07ZGHMHLW/ref=sr_1_2?dchild=1&keywords=plastic%2Bdrawing%2Bstraight%2Bedge&qid=1597169735&s=boo ks&sr=1-2-catcorr&th=1;

\$5.99 + shipping.

#### DEPARTMENT POLICIES AND PROCEDURES

#### **Requirements for Documentation and Archiving**

Each student must submit documentation of the full semester's work at the end of each term, in pdf format. Materials should include research, writing, and design work, including important study models and sketches. Studio faculty will further define how this work should be organized and presented before the end of the semester. Failure to submit the required documentation in usable format may result in a grade reduction in the final grade of the semester. Documentation of the studio work is essential for the NAAB accreditation process and assessment of the architecture program.

The University reserves the right to retain student work for archival purposes. Projects/models, assignments, and exams will be kept at the department's discretion for this purpose. Students will be asked to help with archiving their projects at the end of the semester.

#### Writing Requirements

All written work must meet the standards for English. Poorly written papers may be returned without a grade for revision and resubmission, and may be subject to grade reduction. Students are encouraged to utilize the Woodbury Writing Center. Link is <u>here</u>.

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#### **Grade Requirements**

Refer to the Woodbury University catalog for grading standards and policies.

#### **Environmental Responsibility**

Studio projects shall be designed in a socially and environmentally responsible manner. All projects should reduce dependencies on non-renewable resources.

#### **Class Attendance**

It is mandatory that students take advantage of all scheduled course time. Regular attendance at EVERY class is expected throughout the duration of the class/studio time. Arrival at the beginning of the class period is required. Lateness or early departure will be considered as an absence. 'Regular and prompt attendance at all university classes is required. The instructor is not obligated to assign extra work or to prepare additional examinations for classes missed. It is understood that when 15% of the class time has been missed, the student's absence rate is excessive. Each instructor will announce his/her attendance policy in the course syllabus.

#### **Excused Absence**

Students should report any illness or emergency to their course instructor, preferably before missing the class, by emailing the instructor. Medical reasons for absences can alternatively be shared with the school nurse and/or the coordinator for the ODAS (disabilities office) who will notify instructor of receipt without revealing specific information.

Students who anticipate absence due to religious observance or similar commitments should speak with their instructor at the start of the term to review all dates in question and develop a plan to meet all course requirements.

#### Email

Students are advised to meet with their instructors during posted office hours. Face-to-face communication in discussing and resolving problems is preferable to email exchanges. Additionally, meetings must be scheduled in advance using email correspondence. Email correspondence must be written in a respectful and professional manner. It is the student's responsibility to consistently check for email. students should use their official woodbury.edu email account.

Due to confidentiality and FERPA requirements all faculty, staff and students, when corresponding through email, must use their university provided Woodbury.edu email accounts. Students are encouraged to check this email address regularly as it is the only email address in which they will receive official course or university information.

#### **Grievance Protocol**

Students should use the following protocol for questions, grievances, or general concerns about coursework and the studio environment. Health and safety concerns and emergencies should immediately be directed to campus security (818-252-5208). Academic concerns should be directed first to the student's instructor, and then to the studio coordinator as appropriate. If further consultation is required, the student is advised to meet with the Coordinator and/or the Chair.

#### **Class Syllabus and Structure**

While every effort will be made to follow the outline of the published syllabus, course structure and calendar may be changed at the instructor or coordinator's discretion. Announcements will be made if such changes occur. Students who miss class are responsible for tracking any such announcements.

#### **ONLINE COURSE DELIVERY POLICIES AND GUIDELINES**

#### Formats of delivery:

**Synchronous online:** All instruction is provided via the Internet and no face-to-face instruction is required. Faculty and learners meet for regularly scheduled class sessions.

Synchronous activities provide real-time dialogue that can provide the human interaction that is needed among our Woodbury student population.

Asynchronous online: All instruction is provided via the Internet and no face-to-face instruction is required. Faculty and learners do not meet for regularly scheduled class sessions.

Asynchronous activities allow students with the flexibility to complete certain course work at their own pace, within reason. It also allows students time to think, write, and reflect.

**Hybrid with synchronous online:** An instructional delivery method which combines the traditional delivery and the synchronous distance delivery formats.

**Hybrid with asynchronous online:** An instructional delivery method which combines the traditional delivery and the synchronous distance delivery formats.

**Traditional:** This delivery method allows learners and faculty to meet in person or as a group for regularly scheduled class sessions either on campus or at another physical location.

#### Type of course:

**Lecture**: Refers to the first or primary organization of non-lab class instruction, e.g., a lecture where instructor-based material is presented, or a seminar where material is analyzed and discussed by both students and instructor. Also includes case studies and teambased learning situations. Class meeting time equals 50 minutes per unit per week.

**Studio**: Refers to situations where the student is engaged in the practice and use of techniques for productions in the areas of architecture, interior design, graphic design, and other design forms. This instruction is used to further advance student's skills in their field of design. The instructor role varies from direct assistance to simple availability for questions and supervision. Class meeting time equals 100 minutes per unit per week.

**Laboratory**: Refers to the first organization of laboratory class instruction unless one of the other classifications above is more appropriate. Includes both group instruction and individualized instruction such as biology and physics lessons, supervised computing exercises, and hands-on activities. Class meeting time equals 50 minutes per unit per week.

#### Length of sessions:

16-week (Fall/Spring)

7-week intensive format (Fall/Spring)

5-week intensive format (Fall/Spring)

10-week (Summer)

6-week (Summer Super Sessions)

#### **Online / Hybrid Requirements**

Students must have basic computer skills, including the use of word processing software, email, and the ability to use internet browsers, such as Safari, Firefox, or Chrome.

All communication by email will be using the assigned woodbury.edu address. Students are required to access this email account on a daily base to ensure timely communication.

Woodbury University's Learning Management System (LMS) of record is Moodle. Moodle should be used to provide students information they need to plan, prepare, and learn in the course. This information includes, but is not limited to: (a) your course syllabus; (b) assignment due dates, instructions, and grading rubrics; (c) course schedule; (d) additional course materials and links, etc.; and/or (e) exams.

Students are responsible for meeting the technical requirements of <u>Moodle</u> and <u>RingCentral</u> and to familiarize themselves with the Moodle Learning Management System and RingCentral Communications System.

IT provides a Moodle (and RingCentral for online delivery) orientation "course" visible to students enrolled in all courses. Students unfamiliar with Moodle are required to review or consult it as needed. This ensures class time is dedicated to course content and not technical tutorials. The syllabus should also indicate how IT will support students' online technical needs.

All required materials, including readings, videos, lectures will be posted on and can be accessed through Moodle.

All assignments have to be submitted through Moodle or <u>OneDrive</u>, depending on file size and faculty instructions.

Exams and quizzes will be administered through either Moodle or <u>Proctorio</u>. Students are required to install the Proctorio Extension in advance.

#### Attendance policy

Regular and prompt attendance at all University classes is required. It is the responsibility of the student to adhere to class/studio participation expectations. The instructor is not obligated to assign extra work or to prepare additional content for material missed. It is understood that when 15% of the class time has been missed, the student's absence rate is excessive. The interpretation of this participation policy is left to the discretion of individual faculty.

Attendance of synchronous classes will be measured through attendance of the RingCentral meetings. *Students are required to have their camera turned on for the entire class session to be counted as present*. If technical or privacy issues prevent the student from having the camera turned on, then the student must contact the Office of Student Affairs and apply for an exemption. Students must complete an Accommodations Request Form, which can be downloaded from http://go.woodbury.edu, and found under "Academic Resources." Accommodations cannot be granted prior to the instructor's receipt of a Notification of Special Needs Release Form from the Disabilities Coordinator. Accommodations are never provided retroactively.

Attendance of asynchronous classes will be measured through the last access to the course in Moodle, participation in quizzes and online discussions, as well as submitted assignments by the required day and time.

#### **Protecting Privacy and Data During Remote Instruction**

This class is being conducted over Ring Central and Moodle. As the host, the instructor may be recording the sessions. The recording feature for others is disabled so that no one else will be able to record the sessions. No recording by other means is permitted. The sessions will be posted on the Moodle class website unless otherwise notified. In case of privacy concerns and individual students wanting not to appear in the recording, the student must contact the Office of Student Affairs and apply for an exemption. Students must complete an Accommodations Request Form, which can be downloaded from http://go.woodbury.edu, and found under "Academic Resources." Accommodations cannot be granted prior to

the instructor's receipt of a Notification of Special Needs Release Form from the Disabilities Coordinator. Accommodations are never provided retroactively. If the student prefers to use a pseudonym instead of the real name, please let the instructor know what name will be used so that the instructor knows who you the student is during the session.

Pursuant to the terms of the agreement between the vendors (Moodle and RingCentral) and Woodbury University, the data is used solely for this purpose and the vendor is prohibited from redisclosing this information. Woodbury University also does not use the data for any other purpose. Recordings will be deleted when no longer necessary. However, the recording may become part of an administrative disciplinary record if misconduct occurs during a video conference

## **Calculation of Grade**

The University requires that letter grades are determined using the following values:

Letter	GPA	%	Definition
А	4.00-3.84	96-100	Student learning and accomplishment far exceeds published objectives for the course/test/assignment and student work is distinguished consistently by
A-	3.83-3.50	92-95	is high level of competency and/or innovation.
B+	3.49-3.17	88-91	Student learning and accomplishment goes beyond what is expected in the published objectives for the course/test/assignment and student work is
В	3.16-2.84	84-87	frequently characterized by its special depth of understanding, development, and/or innovative experimentation.
B-	2.83-2.50	80-83	Students learning and accomplishment meets all published objectives for the course/test/assignment and the student work demonstrates the expected
C+	2.49-2.17	76-79	level of understanding, and application of concepts introduced.
С	2.16-1.84	72-75	
C-	1.83-1.50	68-71	Student learning and accomplishment based on the published objectives for the course/test/assignment were met with minimum passing achievement.
D+	1.49-1.17	64-67	
D	1.16-0.60	60-63	
F	0.00-0.60	< 60	Student learning and accomplishment based on the published objectives for the course/test/assignment were not sufficiently addressed nor met.

Course Schedule [subject to revision]

WEEK ONE	INTRODUCTION / PREHISTORY
First class:	Introduction and syllabus review [synchronous]; Lecture [asynchronous]
Reading:	World Architecture: A Cross-Cultural History, pp. 1–33
Discussion:	Discussion of material covered in lecture 1. No work due.
WEEK TWO	3000-1500 BCE
Reading:	World Architecture: A Cross-Cultural History, pp. 34–67
Lecture:	Asynchronous video on Moodle
Discussion:	Assignment of Folio One. Sketches due before start of class.
WEEK THREE	1500-750 BCE
Reading:	World Architecture: A Cross-Cultural History, pp. 68–99
Lecture:	Asynchronous video on Moodle [Labor Day Holiday]
Discussion:	Discussion of lecture and reading. Sketches due before start of class.
WEEK FOUR	700-200 BCE
Reading:	World Architecture: A Cross-Cultural History, pp. 105–149
Lecture:	Asynchronous video on Moodle
Discussion:	Folio One due. Sketches due before start of class.
WEEK FIVE	200 BCE-300 CE
WEEK FIVE Reading:	<b>200 BCE–300 CE</b> World Architecture: A Cross-Cultural History, pp. 150–194
WEEK FIVE Reading: Lecture:	<b>200 BCE–300 CE</b> <i>World Architecture: A Cross-Cultural History,</i> pp. 150–194 Asynchronous video on Moodle
WEEK FIVE Reading: Lecture: Discussion:	<ul> <li>200 BCE–300 CE</li> <li>World Architecture: A Cross-Cultural History, pp. 150–194</li> <li>Asynchronous video on Moodle</li> <li>Assignment of Folio Two. Sketches due before start of class.</li> </ul>
WEEK FIVE Reading: Lecture: Discussion: WEEK SIX	<ul> <li>200 BCE-300 CE</li> <li>World Architecture: A Cross-Cultural History, pp. 150–194</li> <li>Asynchronous video on Moodle</li> <li>Assignment of Folio Two. Sketches due before start of class.</li> <li>300–600</li> </ul>
WEEK FIVE Reading: Lecture: Discussion: WEEK SIX Reading:	200 BCE-300 CE World Architecture: A Cross-Cultural History, pp. 150–194 Asynchronous video on Moodle Assignment of Folio Two. Sketches due before start of class. 300–600 World Architecture: A Cross-Cultural History, pp. 195–229
WEEK FIVE Reading: Lecture: Discussion: WEEK SIX Reading: Lecture:	<ul> <li>200 BCE-300 CE</li> <li>World Architecture: A Cross-Cultural History, pp. 150–194</li> <li>Asynchronous video on Moodle</li> <li>Assignment of Folio Two. Sketches due before start of class.</li> <li>300-600</li> <li>World Architecture: A Cross-Cultural History, pp. 195–229</li> <li>Asynchronous video on Moodle</li> </ul>
WEEK FIVE Reading: Lecture: Discussion: WEEK SIX Reading: Lecture: Discussion:	<ul> <li>200 BCE-300 CE</li> <li>World Architecture: A Cross-Cultural History, pp. 150–194</li> <li>Asynchronous video on Moodle</li> <li>Assignment of Folio Two. Sketches due before start of class.</li> <li>300-600</li> <li>World Architecture: A Cross-Cultural History, pp. 195–229</li> <li>Asynchronous video on Moodle</li> <li>Discussion of lecture and reading. Sketches due before start of class.</li> </ul>
WEEK FIVE Reading: Lecture: Discussion: WEEK SIX Reading: Lecture: Discussion: WEEK SEVEN	<ul> <li>200 BCE-300 CE</li> <li>World Architecture: A Cross-Cultural History, pp. 150–194</li> <li>Asynchronous video on Moodle</li> <li>Assignment of Folio Two. Sketches due before start of class.</li> <li>300-600</li> <li>World Architecture: A Cross-Cultural History, pp. 195–229</li> <li>Asynchronous video on Moodle</li> <li>Discussion of lecture and reading. Sketches due before start of class.</li> <li>600-800</li> </ul>
WEEK FIVE Reading: Lecture: Discussion: WEEK SIX Reading: Lecture: Discussion: WEEK SEVEN Reading:	<ul> <li>200 BCE-300 CE</li> <li>World Architecture: A Cross-Cultural History, pp. 150–194</li> <li>Asynchronous video on Moodle</li> <li>Assignment of Folio Two. Sketches due before start of class.</li> <li>300-600</li> <li>World Architecture: A Cross-Cultural History, pp. 195–229</li> <li>Asynchronous video on Moodle</li> <li>Discussion of lecture and reading. Sketches due before start of class.</li> <li>600-800</li> <li>World Architecture: A Cross-Cultural History, pp. 230–267</li> </ul>
WEEK FIVE Reading: Lecture: Discussion: WEEK SIX Reading: Lecture: Discussion: WEEK SEVEN Reading: Lecture:	<ul> <li>200 BCE-300 CE</li> <li>World Architecture: A Cross-Cultural History, pp. 150–194</li> <li>Asynchronous video on Moodle</li> <li>Assignment of Folio Two. Sketches due before start of class.</li> <li>300-600</li> <li>World Architecture: A Cross-Cultural History, pp. 195–229</li> <li>Asynchronous video on Moodle</li> <li>Discussion of lecture and reading. Sketches due before start of class.</li> <li>600-800</li> <li>World Architecture: A Cross-Cultural History, pp. 230–267</li> <li>Asynchronous video on Moodle</li> </ul>
WEEK FIVE Reading: Lecture: Discussion: WEEK SIX Reading: Lecture: Discussion: WEEK SEVEN Reading: Lecture: Discussion:	<ul> <li>200 BCE-300 CE</li> <li>World Architecture: A Cross-Cultural History, pp. 150–194</li> <li>Asynchronous video on Moodle</li> <li>Assignment of Folio Two. Sketches due before start of class.</li> <li>300-600</li> <li>World Architecture: A Cross-Cultural History, pp. 195–229</li> <li>Asynchronous video on Moodle</li> <li>Discussion of lecture and reading. Sketches due before start of class.</li> <li>600-800</li> <li>World Architecture: A Cross-Cultural History, pp. 230–267</li> <li>Asynchronous video on Moodle</li> <li>NO CLASS on Oct 7. Sketches due at start of normal class time.</li> </ul>
WEEK FIVE Reading: Lecture: Discussion: WEEK SIX Reading: Lecture: Discussion: WEEK SEVEN Reading: Lecture: Discussion: WEEK EIGHT	<ul> <li>200 BCE-300 CE</li> <li>World Architecture: A Cross-Cultural History, pp. 150–194</li> <li>Asynchronous video on Moodle</li> <li>Assignment of Folio Two. Sketches due before start of class.</li> <li>300-600</li> <li>World Architecture: A Cross-Cultural History, pp. 195–229</li> <li>Asynchronous video on Moodle</li> <li>Discussion of lecture and reading. Sketches due before start of class.</li> <li>600-800</li> <li>World Architecture: A Cross-Cultural History, pp. 230–267</li> <li>Asynchronous video on Moodle</li> <li>NO CLASS on Oct 7. Sketches due at start of normal class time.</li> <li>800–1200</li> </ul>
WEEK FIVE Reading: Lecture: Discussion: WEEK SIX Reading: Lecture: Discussion: WEEK SEVEN Reading: Lecture: Discussion: WEEK EIGHT Reading:	<ul> <li>200 BCE-300 CE</li> <li>World Architecture: A Cross-Cultural History, pp. 150–194</li> <li>Asynchronous video on Moodle</li> <li>Assignment of Folio Two. Sketches due before start of class.</li> <li>300–600</li> <li>World Architecture: A Cross-Cultural History, pp. 195–229</li> <li>Asynchronous video on Moodle</li> <li>Discussion of lecture and reading. Sketches due before start of class.</li> <li>600–800</li> <li>World Architecture: A Cross-Cultural History, pp. 230–267</li> <li>Asynchronous video on Moodle</li> <li>NO CLASS on Oct 7. Sketches due at start of normal class time.</li> <li>800–1200</li> <li>World Architecture: A Cross-Cultural History, pp. 269–318</li> </ul>
WEEK FIVE Reading: Lecture: Discussion: WEEK SIX Reading: Lecture: Discussion: WEEK SEVEN Reading: Lecture: Discussion: WEEK EIGHT Reading: Lecture:	<ul> <li>200 BCE-300 CE</li> <li>World Architecture: A Cross-Cultural History, pp. 150–194</li> <li>Asynchronous video on Moodle</li> <li>Assignment of Folio Two. Sketches due before start of class.</li> <li>300-600</li> <li>World Architecture: A Cross-Cultural History, pp. 195–229</li> <li>Asynchronous video on Moodle</li> <li>Discussion of lecture and reading. Sketches due before start of class.</li> <li>600-800</li> <li>World Architecture: A Cross-Cultural History, pp. 230–267</li> <li>Asynchronous video on Moodle</li> <li>No CLASS on Oct 7. Sketches due at start of normal class time.</li> <li>800–1200</li> <li>World Architecture: A Cross-Cultural History, pp. 269–318</li> <li>Asynchronous video on Moodle</li> </ul>

## Course Schedule continued

WEEK NINE	1200-1350
Reading:	World Architecture: A Cross-Cultural History, pp. 319–373
Lecture:	Asynchronous video on Moodle
Discussion:	Discussion of lecture and reading. Sketches due before start of class.
WEEK TEN	1350-1500
Reading:	World Architecture: A Cross-Cultural History, pp. 374–428
Lecture:	Asynchronous video on Moodle
Discussion:	Folio Two due. Sketches due before start of class.
WEEK ELEVEN	1500-1600
Reading:	World Architecture: A Cross-Cultural History, pp. 429–483
Lecture:	Asynchronous video on Moodle
Discussion:	Assignment of Folio Three. Sketches due before start of class.
WEEK TWELVE	1600-1700
Reading:	World Architecture: A Cross-Cultural History, pp. 484–541
Lecture:	Asynchronous video on Moodle
Discussion:	Discussion of lecture and reading. Sketches due before start of class.
WEEK THIRTEEN	1700-1750
Reading:	World Architecture: A Cross-Cultural History, pp. 542–592
Lecture:	Asynchronous video on Moodle
Discussion:	Discussion of lecture and reading. Sketches due before start of class.
WEEK FOURTEEN	1750-1800
Reading:	World Architecture: A Cross-Cultural History, pp. 593–638
Lecture:	Asynchronous video on Moodle
Discussion:	Discussion of lecture and reading. Sketches due before start of class.
WEEK FIFTEEN	STUDIO FINALS
No class	
WEEK SIXTEEN	FINAL EXAMINATIONS
Weds Dec 8	Compiled folios and compiled sketchbook due.

# Woodbury University School of Architecture **Criticism 3: Architecture from Modern (1945-now)** ARCH 556

- Semester: Spring 2020
- Time: Wednesday 3:50 6:20 PM
- Location: Annex/AN110
- **Instructor(s):** Anthony Fontenot
- Office hours: Wednesday 2:00-3:50 pm



Rem Koolhaas, Madelon Vreisendorp, Elia Zenghelis, and Zoe Zenghelis, Exodus, or the Voluntary Prisoners of Architecture, 1972

## **Catalog Description**

Credits 3.00. Students delve into contemporary cultural, societal, and philosophical trends as filtered through architectural theory and manifest in the built environment. The interdependencies of ideology and inhabitation are revealed through global architectural and written case studies between 1945 and now. Prerequisite: Criticism 1.

## Learning Outcomes

Upon completion of this course, it is expected that students will be able to:

- 1. Know the major contemporary architectural discussions and movements, account for their positions as evolutions of and responses to recent histories and events (both within and outside of the discipline), and identify the influential architects and architectures of today.
- 2. Establish personal conceptual alliances within the contemporary schools of architecture thought and production.
- 3. Initiate an independent research affiliation within or in opposition to the contemporary schools of architecture thought and production.

Critical Thinking / Design / Building / Representation / Professionalism

## NAAB Student Performance Criteria

## A.7: Use of Precedents

Understanding of the parallel and divergent histories of architecture and the cultural norms of a variety of indigenous, vernacular, local, regional, settings in terms of their political, economic, social, and technological factors.

## A.8: History & Global Culture

Understanding of the parallel and divergent histories of architecture and the cultural norms of a variety of indigenous, vernacular, local, regional, settings in terms of their political, economic, social, and technological factors.

## **Course Description**

This lecture course will address key developments in architecture from the end of World War II to the present. We will explore the transformations in modern design theory and practice during this period and their major influences. In 1932 the Museum of Modern Art launched the seminal exhibition on "Modern Architecture" that labelled the architecture of the early 20th century as the "International Style." Less than ten years later, amongst the turbulent years of the *Second World War, in* 1941 that same institution launched the *Organic Design In Home Furnishings* exhibition which signaled a major shift in modern design. Building on the theories of Frank Lloyd Wright, in *Towards Organic Architecture* (1950) Bruno Zevi put forth a manifesto for a new European architecture. While in California a more "popular" form of modernism was being celebrated as an alternative to the "hard line" *International Style*. Through the work of Richard Neutra, Charles and Ray Eames, and a list of others, the Case Study House program offered a more relaxed modernism and a new way of living in the open landscape.

By the early 1950s a new generation of designers in Europe, affiliated with Team 10 members and the Independent Group, such as Reyner Banham, and Peter and Alison Smithson sought to challenge the foundation of modern design theory that had dominated since the 1920s. The experimental work of Cedric Price, Yona Friedman, Constant Nieuwenhuys, and the Metabolist group presented a new social and technological vision of society. The 1960s witnessed an explosion of new forms of architecture. The Anglo-American fascination with "pop" architecture, best epitomized by Archigram, Robert Venturi and Denise Scott Brown, and Charles Moore, stood in contrast to the radical Marxist anti-design attitudes in Italy in the work of groups such as Superstudio and Archizoom. Rem Koolhaas and Bernard Tschumi represented a "post-68" generation of designers and theorists that redefined a new direction for architecture and urbanism in the 1970s and 1980s.

At the height of postmodernism, "critical regionalism" emerged as a critique of the "scenographic" approach of historicist facades. New critical practices of the 1980s and 1990s, such as Herzog and de Meuron and Peter Zumthor, represented a renewed interest in abstraction, materiality and "place." This lecture course does not cover a complete survey of the period but rather attempts to present strategic projects with an in-depth analysis of the social, political and technological context that gave rise to their cultural significance. The course will provide the student with a detailed outline of key buildings, projects, theories, publications, and events that have shaped the discipline of architecture since 1945.

## Schedule and Deliverables

#### Week 1 (1/15) Course Introduction

Week 2 (1/22) Organic Architecture: Frank Lloyd Wright, Bruno Zevi, Hugo Haring, Hans Scharoun, Eero Saarinen

## Required Readings:

Raymond Williams, "Organic" in Keywords: A Vocabulary of Culture and Society (New York: Oxford University Press, 1985).

Paul Weiss, "Organic Form: Scientific and Aesthetic Aspects" in Gyorgy Kepes, ed., special issue of Daedalas, Winter (1960).

Bruno Zevi, "Meaning and Scope of the Term Organic in Modern Architecture" in Towards Organic Architecture (London, Faber & Faber, 1950).

## Suggested Reading:

Frank Lloyd Wright, An Organic Architecture; The Architecture of Democracy (Cambridge, MIT Press, 1978), pp 1-21.

Week 3 (1/29) Los Angeles: Postwar Architecture and the Modern House: Rudolf Schindler, Richard Neutra, Gregory Ain, Case Study House Program, John Lautner

Required Readings:

Nicholas Olsberg, "Open World: California Architects and the Modern Home" in *Living in a Modern Way: California Design, 1930-1965*, ed. Wendy Kaplan (Los Angeles: Los Angeles County Museum of Art; Cambridge, MA: MIT Press, 2011).

Esther McCoy, "Arts & Architecture Case Study Houses" in *Blueprints for Modern Living: History and Legacy of the Case Study Houses*, ed. Elizabeth A.T. Smith (Los Angeles: Museum of Contemporary Art; Cambridge, Mass.: MIT Press, 1989).

## **Research Paper Topic**

Due: Each student will select a building for their research paper topic and provide a short (2 or 3 sentences) explanation of their interest in the topic.

**Week 4 (2/5)** <u>The Critique of Modernism</u>: Team 10, Independent Group, Peter and Alison Smithson, Reyner Banham, Nigel Henderson, Theory of the "As Found," "Parallel of Art and Life" (1953), "Patio and Pavilion" (1956), New Brutalism, P + A Smithson, Hunstanton School (1949-1954), Golden Lane Housing (1952), House of the Future (1956)

## Required Readings:

Reyner Banham, "The New Brutalism," The Architectural Review, December (1955).

Alison and Peter Smithson, "The 'As Found' and the 'Found," in *The Independent Group: Postwar Britain and the Aesthetics of Plenty*, ed. David Robbins (Cambridge, Mass.: MIT Press, 1990).

Suggested Readings:

Bernard Rudofsky, Architecture Without Architects: A Short Introduction to Non-pedigreed Architecture (New York: MoMA, 1964).

Ahmad Hamid, *Hassan Fathy and Continuity in Islamic Architecture: The Birth of a New Modern* (Cairo: the American University in Cairo Press, 2010).

Week 5 (2/12) <u>Interactive Architecture or the Theory of Indeterminacy</u>: Constant Nieuwenhuys, Yona Friedman, and Cedric Price

## Required Readings:

Stanley Mathews, "The Fun Palace as Virtual Architecture: Cedric Price and the Practices of Indeterminacy," *Journal of Architectural Education*, Vol. 59, Issue 3, February (2006), 39–48.

Reyner Banham, "Fun and Flexibility" in *Megastructure: Urban Futures Of The Recent Past* (London: Thames and Hudson, 1976).

Suggested Readings:

Sabine Lebesque and Helene Fentener van Vlissingen, Yona Friedman. Structures Serving the Unpredictable (NAi Publishers, May 1999).

Mark Wigley, *Constant's New Babylon: The Hyper-Architecture of Desire* (Rotterdam: Witte de With, Center for Contemporary Art: 010 Publishers, 1998).

## Week 6 (2/19) In-Class Discussion of Research Papers

Due: Outline of Research Paper, bibliography, and presentation of main ideas. Each student will make a short (5 minutes) presentation with images summarizing their current research project.

## Week 7 (2/26) Fontenot out of town

## Week 8 (3/4) Mid-Term Student Presentations

Assignment 1, Mid-Term Research Paper: Due

## Week 9 (3/11) Spring Break – No Class

Week 10 (3/18) <u>Anti-Design, Pop, and the "Ordinary"</u>: Superstudio, Archizoom, Archigram, Robert Venturi, Denise Scott Brown, Charles Moore

Required Readings:

Peter Cook, "Action and Process," in *Architecture: Action and Plan* (London: Studio Vista, 1967), 67-88.

Robert Venturi, Denise Scott Brown, and Steven Izenour, "Ugly and Ordinary Architecture," in *Learning from Las Vegas: The Forgotten Symbolism of Architectural Form* (Cambridge, Mass.: MIT Press, 1977).

Suggested Readings:

Hans Hollein, "Everything is Architecture," [1968] reprinted in *Architecture Culture, 1943-1968: A Documentary Anthology*, eds., Joan Ockman and Edward Eigen (New York: Columbia University Graduate School of Architecture, Planning, and Preservation, 1993), 459-62.

Gianni Pettena, *Radicals, Design and Architecture 1960-75* (Venezia: La Biennale di Venezia; Firenze: Il Ventilabro, 1996).

## Week 11 (3/25) Cesar Chavez Day (No Class)

Week 12 (4/1) Architecture After 1968: Rem Koolhaas and Bernard Tschumi

Required Readings:

Peter Eisenman, "Strategies of the Void: Rem Koolhaas, Jussieu Libraries, 1992-93" in *Ten Canonical Buildings* 1950-2000 (New York: Rizzoli: 2008).

Bernard Tschumi, "Violence and Architecture" in *Architecture and Disjunction* (Cambridge, Mass.: MIT Press, 1994).

Suggested Readings:

Rem Koolhaas, "Imagining Nothingness" in Rem Koolhaas, and Bruce Mau, *Small, Medium, Large, Extra-Large: Office for Metropolitan Architecture*, ed. Jennifer Sigler (New York, N.Y.: Monacelli Press, 1998).

Felicity D. Scott, "Involuntary Prisoners of Architecture" in *Architecture or Techno-utopia: Politics after Modernism* (Cambridge, Mass.: MIT Press, 2007).

Week 13 (4/8) <u>Places and Non-Places: Responsive Architecture</u>: Herzog & de Meuron, Peter Zumthor, Jean Nouvel, Toyo Ito

Required Readings:

Marc Augé, *Non-Places: Introduction to an Anthropology of Supermodernity* (London; New York: Verso, 1995), excerpt.

Kenneth Frampton, "Towards a Critical Regionalism: Six Points for an Architecture of Resistance" in *Anti-Aesthetic. Essays on Postmodern Culture*, ed. Hal Foster (Seattle: Bay Press, 1983).

Week 14 (4/15) Student Presentations

Week 15 (4/22) Student Presentations

Week 16 (4/29) Studio Finals
## Week 17 (5/6) Final Exam

#### Final Grade Calculation

je of Grade

## In-Class / In-Studio Processes

Weekly class meetings will consist of lectures, student presentations, and discussion of readings. Students are expected to take notes on the lectures and formulate thoughtful questions. Each week students are required to do all assigned readings and prepare responses and questions (minimum three) based on each reading. These reading responses will serve as the basis for discussing the reading in class. It is mandatory that all readings are printed out and brought to class. Class participation discussions is an important aspect as the course, as outlined in the "Assessment of Student Performance."

Assessment will be primarily based on the two main assignments plus class participation, reading responses, and student presentations.

## Assignments and Assessment

## Semester-Long Research Paper Topic

Each student will select a building that they will work on for a semester-long research project. The building may be from any historical period up to the present. The building you select should have made an important contribution to architecture with significant scholarly publications written about it. Please submit the name of the building, name of the architect, and date of completion of the building with a short (2 or 3 sentences) explanation of your interest in the topic. **Due January 30**, post on moodle.

For an example of an analysis of a singular building, see Peter Eisenman: "The Umbrella Diagram: Ludwig Mies van der Rohe, Farnsworth House, 1946-51" or "The Destruction of the Axis: Daniel Libeskind, Jewish Museum, 1989-1999" in *Ten Canonical Buildings 1950-2000* (2008), posted on moodle.

## **Research Paper Preparations**

Activities and Processes: Outline of Research Paper, 100-150-word abstract that clearly states the thesis of the research paper, and a bibliography with minimum 4 scholarly sources (blogs and other websites are not permitted). The bibliography should follow the *Chicago Manual of Style* method. Each student will make a 5-10-minute presentation with images. **Due: Feb. 20**, posted on moodle no later than 2:00 pm.

Learning Outcomes: A.1, A.10.

**Assignment 1**: Mid-Term Research Paper, **Due: March 6**, posted on moodle no later than 2:00 pm. Activities and Processes: 600-word essay following the *Chicago Manual of Style* citation method with properly cited footnotes, bibliography, and images. 30% of the grade will be based on this assignment.

Gather a general bibliography that includes at least 7 sources, including books and articles. The articles can be written by the architect or by someone else. At least three of the sources should be specific to the building that you are researching. The point of doing the general bibliography is so that you can become familiar with the range of publications that have been done on or by the architect. The three main selected sources, including books and articles, should be very specific to the building you are researching and ideally should discuss the theory behind the building. Learning Outcomes: A.1, A.10.

**Assignment 2**: Final Research Paper, Due: May 8, posted on moodle no later than 6:00 pm. Activities and Processes: 2200-word essay following the *Chicago Manual of Style* citation method with properly cited footnotes, bibliography and images. 50% of the grade will be based on this assignment.

Learning Outcomes: A.1, A.10.

## **Class Participation, Reading Responses, Student Presentations**

Class Participation assessment will be based on 1) weekly reading responses and 2) active participation in class discussions based on lectures and readings, and 3) student lecture presentations.

Assignment 3: Student Presentations based on weekly readings, Due: posted on moodle no later than 2:00 pm on the day of the presentation.

Activities and Processes: Each lecture week an assigned student will make a presentation based on a topic related to the weekly readings. Students should not present general historical overviews but rather explore a specific and limited topic in detail. Also, one should avoid presenting the same material that will be covered in the main lecture. Students should discuss their presentation ideas with the instructor beforehand. Each student should argue a position based on the readings and develop a 10-minute presentation with images.

Learning Outcomes: A.1, A.10

#### Reading responses, Due each lecture day.

Activities and Processes: Each lecture week student must come to class prepared to discuss each of the assigned readings. Students must print out each assigned reading and highlight critical aspects of the reading that should serve as the basis for posing questions and contributing to class discussions. Learning Outcomes: A.1, A.10

#### Assessment for Participation

#### Participation

- 1. Poses thoughtful questions to instructor or to other class members
- 2. Offers thoughtful responses to questions posed by instructor
- 3. Demonstrates curiosity and enthusiasm in class and in assignments
- 4. Considers fellow students through punctuality and responsibility

## **Assessment for Written Work**

A successful response demonstrates exceptional comprehension of the readings; thesis raises provocative and insightful questions and offers supporting evidence that strengthens the argument. Furthermore, it uses language that is well-chosen, organized, and is free from errors in spelling and grammar.

#### Written work

- 1. Clearly articulates an argument based on cited references
- 2. Demonstrates comprehension of readings and lectures
- 3. Clearly argues using well-chosen supporting references
- 4. Clearly and convincingly argues the hypothesis
- 5. Makes convincing use of visual evidence where required
- 6. Correctly uses spelling and grammar

#### Research

- 1. Demonstrates comprehensiveness and intelligent selection of sources
- 2. Shows insight and rigor in organization of sources

3. Sources in text are properly cited following the *Chicago Manual of Style* conventions of academic writing

4. Annotated bibliography follows the Chicago Manual of Style conventions of academic writing

All written work must follow the *Chicago Manual of Style* citation method, including bibliographies, essays, and footnotes. It is the responsibility of the student to become familiarize with this method of citation. For a quick overview see: <u>http://www.chicagomanualofstyle.org/tools_citationguide.html</u>

#### **Estimate of Costs**

The primary cost associated with this class will be in printing weekly readings. The total cost should not exceed \$100.00.

## Attendance Policy

It is mandatory to attend all classes. Missing three or more classes constitutes grounds for academic withdrawal from the course.

#### **Moodle Policy**

All course material, including readings, will be posted on moodle. Students will submit all assignments on moodle.

#### DEPARTMENT POLICIES AND PROCEDURES

#### **Requirements for Documentation and Archiving**

Every student is responsible for digitally archiving their work. An assignment that has not been digitally archived will be considered incomplete and will not receive credit. Please use the process provided by your instructor to produce a single PDF document for each assignment. Failure to submit the required documentation in usable format may result in a grade reduction in the final grade of the semester. Documentation of the studio work is essential for the NAAB accreditation process and assessment of the architecture program.

The university reserves the right to retain student work for archival purposes. Projects/models, assignments, and exams will be kept at the department's discretion for this purpose. Students will be asked to help with archiving their projects at the end of the semester.

#### Writing Requirements

All written work must meet the standards for English. Poorly written papers may be returned without a grade for revision and resubmission, and may be subject to grade reduction. Students are encouraged to utilize the Woodbury Writing Center.

#### Studio Culture

The studio environment is an essential component in learning to become an architect. One goal of the School of Architecture is to create a vibrant, exploratory, safe and respectful learning culture for students. Only through respect between faculty and students, as well as students among themselves, can a healthy educational studio culture be fostered. Students are required to uphold high standards of behavior and academic discipline while in the studio. See the full Studio Guidelines and Studio Culture Policy for more information.

#### School Policy on Social Equity and Diversity

Our mission is to provide an environment where people can learn, teach and work with a shared sense of purpose, core values and respect without bias towards individual beliefs, values and areas of difference. We do this in an effort to create a community that respects and values the full and equal inclusion of its members. Our goal is to provide an environment that is welcoming and inclusive of all.

#### Accommodations for students with identified disabilities

Woodbury University is committed to making reasonable accommodations to assist individuals with disabilities in reaching their academic potential. Students desiring accommodations due to a physical, learning or psychological disability must first complete an Accommodations Request Form, which can be downloaded from http://go.woodbury.edu, and found under "Academic Resources." Accommodations cannot be granted prior to the instructor's receipt of a Notification of Special Needs Release Form from the Disabilities Coordinator. Accommodations are never provided retroactively. (For more information, contact the Disabilities Coordinator in the Whitten Center (818) 394-3345.)

#### Academic Honesty

Because the integrity of the academic enterprise of any institution of higher education requires honesty in scholarship and research, academic honesty is required at Woodbury University. Academic integrity is important for two reasons: first, independent and original scholarship ensures that students and scholars derive the most from their educational experience and the pursuit of knowledge. Second, academic dishonesty violates the most fundamental values of a community of scholars and depreciates the achievements of the entire University community. Accordingly, Woodbury University views academic dishonesty as one of the most serious offenses that a member of our community can commit. Adherence to the Academic Honesty Policy reflects the commitment of our community to the ideals of learning, research, and scholarship. See Catalog for the entire Academic Honesty Policy.

#### Grade Requirements

Refer to the Woodbury University catalog for grading standards and policies.

#### Environmental Responsibility

Studio projects shall be designed in a socially and environmentally responsible manner. All projects should reduce dependencies on non-renewable resources.

#### **Class Attendance**

It is mandatory that students take advantage of all scheduled course time. Regular attendance at EVERY class is expected throughout the duration of the class/studio time. Arrival at the beginning of the class period is required. Lateness or early departure will be considered as an absence. Regular and prompt attendance at all university classes is required. The instructor is not obligated to assign extra work or to prepare additional examinations for classes missed. It is understood that when 15% of the class time has been missed, the student's absence rate is excessive. Each instructor will announce his/her attendance policy in the course syllabus.

#### Excused Absence

Students should report any illness or emergency to their course instructor, preferably before missing the class, by emailing the instructor. Written documentation (doctor's note, etc.) is required for an excused absence, and should be submitted to the instructor at the next class meeting. Extended absence due to medical issues, family issues, etc. should be reported to the Dean of Students' office for appropriate documentation.

Students who anticipate absence due to religious observance or similar commitments should speak with their instructor at the start of the term to review all dates in question and develop a plan to meet all course requirements.

#### Email

Students are advised to meet with their instructors during posted office hours. Face-to-face communication in discussing and resolving problems is preferable to email exchanges. Additionally, meetings must be scheduled in advance using email correspondence. Email correspondence must be written in a respectful and professional manner. It is the student's responsibility to consistently check for email.

#### Grievance Protocol

Students should use the following protocol for questions, grievances, or general concerns about coursework and the studio environment. Health and safety concerns and emergencies should immediately be directed to campus security (818-252-5208). Academic concerns should be directed first to the student's instructor, and then to the studio coordinator as appropriate. If further consultation is required, the student is advised to meet with the Coordinator and/or the Department Chair.

#### **Class Syllabus and Structure**

While every effort will be made to follow the outline of the published syllabus, course structure and calendar may be changed at the instructor or coordinator's discretion. Announcements will be made if such changes occur. Students who miss class are responsible for tracking any such announcements.

#### Calculation of Grade

Letter grades are converted to numeric values using the following values:

Letter	GPA	%	Definition
А	4.00-3.84	96-100	Student learning and accomplishment far exceeds published objectives for the course/test/assignment and student work is distinguished
A-	3.83-3.50	92-95	consistently by is high level of competency and/or innovation.
B+	3.49-3.17	88-91	Student learning and accomplishment goes beyond what is expected in the published objectives for the course/test/assignment and student
В	3.16-2.84	84-87	development, and/or innovative experimentation.
B-	2.83-2.50	80-83	Students learning and accomplishment meets all published objectives for the course/test/assignment and the student work demonstrates the expected level of understanding, and application of concepts introduced.
C+	2.49-2.17	76-79	
С	2.16-1.84	72-75	
C-	1.83-1.50	68-71	Student learning and accomplishment based on the published objectives for the course/test/assignment were met with minimum
D+	1.49-1.17	64-67	passing achievement.
D	1.16-0.60	60-63	
F	0.00-0.60	< 60	Student learning and accomplishment based on the published objectives for the course/test/assignment were not sufficiently addressed nor met.

## Woodbury University School of Architecture Criticism 4: Research Salon and Thesis Preparation ARCH 648

Semester:	Fall 2020
Time:	Tuesday and Friday 9:00 - 10:15am
Location:	RingCentral Meetings
Instructors:	Ryan Tyler Martinez (ryantyler.martinez@woodbury.edu)
Office Hours:	Monday 1-3pm, Thursday 1-3pm (Appointment only)

## Catalog Description

A research seminar treated as a design ideas salon introduces contemporary architectural questions and establishes the practical and theoretical context of the thesis project. Students incorporate the issues presented into a research platform and methodology, and prepare a thesis proposal. Seminar, six hours per week. Prerequisite: ARCH 556, Criticism 3, ARCH 575, Graduate Fieldwork Studio.

Three Unit Lecture.

## Learning Outcomes

Minimum to NAAB Criteria:

PC.4 History and Theory: How the program ensures that students understand the histories and theories of architecture and urbanism, framed by diverse social, cultural, economic, and political forces, nationally and globally.

## Learning Outcomes

1. Develop an architecture research affiliation from either previous coursework in the Master of Architecture or through a focus declaration within the Master of Science in Architecture into

argumentation, methodology, and research for an independent thesis proposal.

2. Incorporate considerations of aesthetics, ideology, process, program, site, and typology in the development of an idea for the design of the built environment.

3. Produce a compilation of research as a foundation for the ensuing Thesis Studio.

4. Connect academic project ideation with longer-term career trajectories.

5. Formulate an architectural position in relationship to the histories and theories that shape architectural discourse.

Woodbury University School of Architecture

Semester: Fall 2020 Criticism 4: Research Salon and Thesis Preparation

ARCH 648

Time: Tuesday, Friday 9:00 - 10:15am RingCentral Meetings

Instructor: Ryan Tyler Martinez

Office Hours: Monday and Thursday - 1:00-3:00pm (By appointment only, Online)

ryantyler.martinez@woodbury.edu

# Criticism 4: Research Salon & Thesis Preparation

# Fall 2020

## Course Descriptioи

The goal of this seminar is to create a platform for students to understand and develop a thesis topic that supports current tangents of architectural discussion in today's context. Throughout the semester students will be asked to participate in a series of assignments that will engage in conversations and theories of contemporary architecture. We will focus primarily on different ways of working, both through modes of techniques for accidental and deliberate disciplinary misbehavior to help students argue and position their placement within a larger architectural discourse. Additionally, this seminar explores the possibility of misaligning work for creative speculation. The class will be broken into four parts: Context (Where), Technique (How), Problem (What), and Theory (Why). These four parts will be used to create an architectural thesis proposal for the Spring 2021 semester. The ultimate aim is to create a body of work that acts in parallel with traditional architectural contingencies such as site, program, precedent, codes, politics, and social engagement; while also focusing on individual authorship, form, tectonics, representation, and theory. By the end of the semester, students should be able to conceptualize a clear process between 2D drawings and 3D models in relationship to building ideas and an articulated thesis statement supported by research, individual interest, and supporting elements.

## Context (Шиеге)

## In what context should we be talking about context?

Each thesis project will have its own context, program, and architectural problem. Students will be asked to diagram and produce site research for a site of their choice. We will be focused on two approaches to context; first being the theoretical and overall disciplinary discussion and the second dealing with principles of site planning and design. Principles include site planning and topography, implications of design decisions in regards to social engagement and public access, adaptive reuse of buildings ideas in architectural history and theory, and understanding larger conversation about context like site-specificity, and critical-regionalism.

## Technique (How)

## Project = Technique = Architect

In some ways, the word technique could be one of the most important subjectivities in architecture. It determines how one starts and works on a project. It also becomes very autobiographical towards the architect, which in the context of this seminar is a very good thing. After the first digital turn in architecture, there have been many advances in technology through software development and social connectivity of awareness. This class will allow students to become more aware of the different ways of working through the study of precedents and methods and also help them create their technique to use throughout their career.

## Probleи (Шhat)

A clear architectural problem usually deals with well know historical and theoretical discussions amongst architects. We will be examining the difference between critical architectural problems and problems one might face in practice such as clients, codes, and regulations. Historical precedents such as the corner problem or the nine square problem have been used throughout the 20th century. Social injustice has become a very important problem for architecture. We will be looking at more contemporary examples like diversity and public responsibility as a potential thesis topic along with other types of architectural problems we might face in the 21st century such as digital platforms and cross-collaborative engagement.

## Writing (Mhy)

Throughout the semester there will be reading assignments and writing responses. These readings will reflect past and contemporary conversations in architecture. We will also be looking at contemporary art history, and types of writing techniques. Students will be required to read before every class and are expected to participate in class discussions or debates. All students will be required to have a thesis statement written by the end of the semester which should support and outline your thesis production for Spring 2021

#### Attendance Policy

Provide course-specific attendance policies beyond those listed in the Departmental Policies and Procedures section of the standard syllabus template. State the number of absences, if any, a student can have in the course without it impacting their grade. If attendance is part of the overall grade, state that in the grading policy. Also state any consequences for repeated tardiness to class.

#### Schedule and Deliverables

See Course Schedule on next page. This syllabus is subject to change and/or revision during the academic term, allowing the instructor to make minor changes to the syllabus such as due dates, assignments, etc. as appropriate.

## Schedule and Deliverables

	Tuesday	Friday
Шеек 1 Аид 25 & 28	Lecture - Towards Thesis (What) 1.0	5min Presentations: Thesis Topic Interests
Week 2 Sep 1 & 4	Lecture - Towards Thesis (What) 2.0	Assignment Due: "Table of Contents"
Шеек 3 Sep 8 & 11	Lecture/Discussion	Assignment Due: Precedents and Diagrams
Шеек 4 Sep 15 & 18	Lecture: Technique (How) 1.0	Workshop 1.0 (3D modeling, (hard modeling, Rhino)
Шеек 5 Sep 22 & 25	Lecture: Technique (How) 2.0	Workshop 2.0 (3D modeling, soft modeling, rhino – maya - zbrush)
Шеек 6 Sep 29 & Oct 2	Lecture/Discussion	Assignment Due: Draft Thesis Statement and Presentation Due
Шеек 7 Oct 6 & 9	No Class – University Enrichment Day	Workshop 3.0 (analog, physical objects – paintings, drawing, ready-mades)
Шеек 8 Oct 13 & 16	Lecture/Discussion	Working Session
Week 9 Oct 20 & 23	Lecture/Discussion	Midterm Review: What, How, and Why
Шеек 10 Oct 27 & 30	Lecture: Context (Where) 1.0	Working Session
Шеек 11 Nov 3 & 6	Lecture: Context (Where) 2.0	Working Session
Шеек 12 Nov 10 & 13	Working Session	Assignment Due: Final Thesis Statement Due
Шеек 13 Nov 17 & 20	Working Session	Thesis Presentation Draft Due
Шеек 14 Nov 24 & 27	Lecture/Discussion	No Class – Thanksgiving break
Шеек 15 Dec 1 & 4	No Class – Studio Finals	No Class – Studio Finals
Week 16 Dec 8 & 12	Final Review TBD: What, How, Where, and Why	No Class – Winter Break

#### **Final Grade Calculation**

Participation	10%
Assignments	20%
Midterm	25%
Final	45%

#### Software

This class will require the use of the following software: Rhino 5/6, Adobe Illustrator CC, Adobe In-Design CC, Adobe Photoshop CC

#### Free Lynda.com Account

Complete the LA Public Library e-card application online at: http://www.lapl.org/about-lapl/contact-us/e-card/e-card-registration

Once registration is complete access Lynda.com Portal - https://www.lynda.com/portal/ sip?org=lapl.org

#### **Digital Submissions**

Students will be required to submit PDF and 3DM formats of their work after assignments. Please use the following naming conventions when submitting digital work: F20_ARCH 648_Martinez_Lastname_Firstname_assignment name

#### Submitting Late Work

Late work will be penalized at a rate of 10% per day up to 5 days late after which no credit will be given. Circumstances may allow some extra makeup work to compensate for lost credit.

#### Estimate of Costs

Academic pricing for Rhinoceros is \$190. Also, we will be using software that is free (open source) or is already installed in the computer labs. All are free except Rhino. It is expected that students bring laptops to class or arrange to work with someone who has one

#### Moodle Policy

Course content will be uploaded to the Moodle course page for student review and all submittals will be uploaded by students to the appropriate assignment on Moodle for instructor review.

#### Web Cam Usage

It is expected that you keep your web cam on during class meetings. Turning off your web cam momentarily is acceptable, but you should keep in mind that it is equivalent to leaving the classroom in the physical world. Please speak to your instructor if you are in a situation that prevents you from using your web cam. It is expected that all participants will comport themselves responsibly and professionally or be removed from the session and have participation credit for that day rescinded.

#### DEPARTMENT POLICIES AND PROCEDURES

#### Requirements for Documentation and Archiving

Each student must submit documentation of the full semester's work at the end of each term, in pdf format. Materials should include research, writing, and design work, including important study models and sketches. Studio faculty will further define how this work should be organized and presented before the end of the semester. Failure to submit the required documentation in usable format may result in a grade reduction in the final grade of the semester. Documentation of the studio work is essential for the NAAB accreditation process and assessment of the architecture program.

The university reserves the right to retain student work for archival purposes. Projects/models, assignments, and exams will be kept at the department's discretion for this purpose. Students will be asked to help with archiving their projects at the end of the semester.

#### Writing Requirements

All written work must meet the standards for English. Poorly written papers may be returned without a grade for revision and resubmission, and may be subject to grade reduction. Students are encouraged to utilize the Woodbury Writing Center.

#### Studio Culture

The studio environment is an essential component in learning to become an architect. One goal of the School of Architecture is to create a vibrant, exploratory, safe and respectful learning culture for students. Only through respect between faculty and students, as well as students among themselves, can a healthy educational studio culture be fostered. Students are required to uphold high standards of behavior and academic discipline while in the studio. See the full Studio Guidelines and Studio Culture Policy for more information.

#### School Policy on Social Equity and Diversity

Our mission is to provide an environment where people can learn, teach and work with a shared sense of purpose, core values and respect without bias towards individual beliefs, values and areas of difference. We do this in an effort to create a community that respects and values the full and equal inclusion of its members. Our goal is to provide an environment that is welcoming and inclusive of all.

#### Universal Pedagogy

Woodbury University is committed to making reasonable accommodations to assist individuals with disabilities in reaching their academic potential. Students desiring accommodations due to a physical, learning or psychological disability must first complete an Accommodations Request Form, which can be downloaded from http://go.woodbury.edu, and found under "Academic Resources." Accommodations cannot be granted prior to the instructor's receipt of a Notification of Academic Accommodation Plan (NAAP) from the Disabilities Coordinator. Accommodations are never provided retroactively. (For more information, contact the Disabilities Coordinator in the Whitten Center (818) 394-3345.)

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Academic integrity is important for two reasons: first, independent and original scholarship ensures that students and scholars derive the most from their educational experience and the pursuit of knowledge. Second, academic dishonesty violates the most fundamental values of a community of scholars and depreciates the achievements of the entire University community. Accordingly, Woodbury University views academic dishonesty as one of the most serious offenses that a member of our community can commit. Adherence to the Academic Honesty Policy reflects the commitment of our community to the ideals of learning, research, and scholarship. See Catalog for the entire Academic Honesty Policy.

#### Grade Requirements

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Studio projects shall be designed in a socially and environmentally responsible manner. All projects should reduce dependencies on non-renewable resources.

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It is mandatory that students take advantage of all scheduled course time. Regular attendance at EVERY class is expected throughout the duration of the class/studio time. Arrival at the beginning of the class period is required. Lateness or early departure will be considered as an absence. 'Regular and prompt attendance at all university classes is required. The instructor is not obligated to assign extra work or to prepare additional examinations for classes missed. It is understood that when 15% of the class time has been missed, the student's absence rate is excessive. Each instructor will announce his/her attendance policy in the course syllabus.

#### Excused Absence

Students should report any illness or emergency to their course instructor, preferably before missing the class, by emailing the instructor. Medical reasons for absences can alternatively be shared with the school nurse and/or the coordinator for the ODAS (disabilities office) who will notify instructor of receipt without revealing specific information.

Students who anticipate absence due to religious observance or similar commitments should speak with their instructor at the start of the term to review all dates in question and develop a plan to meet all course requirements.

#### Email

Students are advised to meet with their instructors during posted office hours. Face-to-face communication in discussing and resolving problems is preferable to email exchanges. Additionally, meetings must be scheduled in advance using email correspondence. Email correspondence must be written in a respectful and professional manner. It is the student's responsibility to consistently check for email. students should use their official woodbury.edu email account.

Due to confidentiality and FERPA requirements all faculty, staff and students, when corresponding through email, must use their university provided Woodbury.edu email accounts. Students are encouraged to check this email address regularly as it is the only email address in which they will receive official course or university information.

#### **Grievance Protocol**

Students should use the following protocol for questions, grievances, or general concerns about coursework and the studio environment. Health and safety concerns and emergencies should immediately be directed to campus security (818-252-5208). Academic concerns should be directed first to the student's instructor, and then to the studio coordinator as appropriate. If further consultation is required, the student is advised to meet with the Coordinator and/or the Chair (Marc Neveu, both Undergraduate and Graduate).

#### Class Syllabus and Structure

While every effort will be made to follow the outline of the published syllabus, course structure and calendar may be changed at the instructor or coordinator's discretion. Announcements will be made if such changes occur. Students who miss class are responsible for tracking any such announcements.

#### ONLINE COURSE DELIVERY POLICIES AND GUIDELINES

#### Formats of delivery:

**Synchronous online:** All instruction is provided via the Internet and no face-to-face instruction is required. Faculty and learners meet for regularly scheduled class sessions.

Synchronous activities provide real-time dialogue that can provide the human interaction that is needed among our Woodbury student population.

**asynchronous online**: All instruction is provided via the Internet and no face-to-face instruction is required. Faculty and learners do not meet for regularly scheduled class sessions.

Asynchronous activities allow students with the flexibility to complete certain course work at their own pace, within

reason. It also allows students time to think, write, and reflect.

**hybrid with synchronous online:** An instructional delivery method which combines the traditional delivery and the synchronous_distance delivery formats.

**hybrid with asynchronous online:** An instructional delivery method which combines the traditional delivery and the synchronous_distance delivery formats.

**traditional:** This delivery method allows learners and faculty to meet in person or as a group for regularly scheduled class sessions either on campus or at another physical location.

#### Type of course:

**Lecture**: Refers to the first or primary organization of nonlab class instruction, e.g., a lecture where instructor-based material is presented, or a seminar where material is analyzed and discussed by both students and instructor. Also includes case studies and team-based learning situations. Class meeting time equals 50 minutes per unit per week.

**Studio**: Refers to situations where the student is engaged in the practice and use of techniques for productions in the areas of architecture, interior design, graphic design, and other design forms. This instruction is used to further advance student's skills in their field of design. The instructor role varies from direct assistance to simple availability for questions and supervision. Class meeting time equals 100 minutes per unit per week.

Laboratory: Refers to the first organization of laboratory class instruction unless one of the other classifications above is more appropriate. Includes both group instruction and individualized instruction such as biology and physics lessons, supervised computing exercises, and hands-on activities. Class meeting time equals 50 minutes per unit per week.

#### Length of sessions:

16-week (Fall/Spring)
7-week intensive format (Fall/Spring)
5-week intensive format (Fall/Spring)
10-week (Summer)
6-week (Summer Super Sessions)

#### Online / Hybrid Requirements

Students must have basic computer skills, including the use of word processing software, email, and the ability to use internet browsers, such as Safari, Firefox, or Chrome.

All communication by email will be using the assigned woodbury.edu address. Students are required to access this email account on a daily base to ensure timely communication. Woodbury University's Learning Management System (LMS) of record is Moodle. Moodle should be used to provide students information they need to plan, prepare, and learn in the course. This information includes, but is not limited to: (a) your course syllabus; (b) assignment due dates, instructions, and grading rubrics; (c) course schedule; (d) additional course materials and links, etc.; and/or (e) exams.

Students are responsible for meeting the technical requirements of <u>Moodle</u> and <u>RingCentral</u> and to familiarize themselves with the Moodle Learning Management System and RingCentral Communications System.

IT provides a Moodle (and RingCentral for online delivery) orientation "course" visible to students enrolled in all courses. Students unfamiliar with Moodle are required to review or consult it as needed. This ensures class time is dedicated to course content and not technical tutorials. The syllabus should also indicate how IT will support students' online technical needs.

All required materials, including readings, videos, lectures will be posted on and can be accessed through Moodle.

All assignments have to be submitted through Moodle or <u>OneDrive</u>, depending on file size and faculty instructions.

Exams and quizzes will be administered through either Moodle or <u>Proctorio</u>. Students are required to install the Proctorio Extension in advance.

#### Attendance policy

Regular and prompt attendance at all University classes is required. It is the responsibility of the student to adhere to class/studio participation expectations. The instructor is not obligated to assign extra work or to prepare additional content for material missed. It is understood that when 15% of the class time has been missed, the student's absence rate is excessive. The interpretation of this participation policy is left to the discretion of individual faculty.

Attendance of synchronous classes will be measured through attendance of the RingCentral meetings. Students are required to have their camera turned on for the entire class session to be counted as present. If technical or privacy issues prevent the student from having the camera turned on, then the student must contact the Office of Student Affairs and apply for an exemption. Students must complete an Accommodations Request Form, which can be downloaded from http://go.woodbury.edu, and found under "Academic Resources." Accommodations cannot be granted prior to the instructor's receipt of a Notification of Special Needs Release Form from the Disabilities Coordinator. Accommodations are never provided retroactively. Attendance of asynchronous classes will be measured through the last access to the course in Moodle, participation in quizzes and online discussions, as well as submitted assignments by the required day and time.

#### Protecting Privacy and Data During Remote Instruction

This class is being conducted over Ring Central and Moodle. As the host, the instructor may be recording the sessions. The recording feature for others is disabled so that no one else will be able to record the sessions. No recording by other means is permitted. The sessions will be posted on the Moodle class website unless otherwise notified. In case of privacy concerns and individual students wanting not to appear in the recording, the student must contact the Office of Student Affairs and apply for an exemption. Students must complete an Accommodations Request Form, which can be downloaded from http://go.woodbury.edu, and found under "Academic Resources." Accommodations cannot be granted prior to the instructor's receipt of a Notification of Special Needs Release Form from the Disabilities Coordinator. Accommodations are never provided retroactively. If the student prefers to use a pseudonym instead of the real name, please let the instructor know what name will be used so that the instructor knows who you the student is during the session.

Pursuant to the terms of the agreement between the vendors (Moodle and RingCentral) and Woodbury University, the data is used solely for this purpose and the vendor is prohibited from re-disclosing this information. Woodbury University also does not use the data for any other purpose. Recordings will be deleted when no longer necessary. However, the recording may become part of an administrative disciplinary record if misconduct occurs during a video conference.

## Calculation Of Grade

Letter grades are converted to numeric values using the following values:

Letter	GPA	%	Definition
A	4.00-3.84	96-100	Student learning and accomplishment far exceeds published objectives for the course/test/assignment and student work is
A-	3.83-3.50	92-95	distinguished consistently by is high level of competency and/or innovation.
B+	3.49-3.17	88-91	Student learning and accomplishment goes beyond what is expected in the published objectives for the course/test/assignment and
В	3.16-2.84	84-87	student work is frequently characterized by its special depth of understanding, development, and/or innovative experimentation.
B-	2.83-2.50	80-83	Students learning and accomplishment meets all published objectives for the course/test/assignment and the student work demonstrates
C+	2.49-2.17	76-79	the expected level of understanding, and application of concepts introduced.
С	2.16-1.84	72-75	
C-	1.83-1.50	68-71	Student learning and accomplishment based on the published objectives for the course/test/assignment were met with minimum
D+	1.49-1.17	64-67	passing achievement.
D	1.16-0.60	60-63	
F	0.00- 0.60	< 60	Student learning and accomplishment based on the published objectives for the course/test/assignment were not sufficiently addressed nor met.

## Syllabi B.1 Pre-Design (B. Arch & M. Arch)

Woodbury University School of Architecture Studio 3A ARCH 383

## Un-Park/Re-House: Figueroa X-auto Retrofit

Semester	Fall 2019
Time	Tuesday / Friday 1:15-6:15 pm
Location	Naidorf Hall
Instructors	Berenika Boberska ( <u>berenika_b@hotmail.com</u> ), Patrick Geske
	(patrickgeske@gmail.com), Louis Molina (louis.molina@woodbury.edu),
	Paulette Singley (paulette.singley@gmail.com)

Office Hours T.B.A.



Edward Ruscha, Thirtyfour Parking Lots in Los Angeles (1967)

## **Catalog Description**

Through critical analysis and comparison of the historical, contemporary, and multicultural evolution of house and housing, the studio addresses the form and meaning of the dwelling with a discussion that juxtaposes interior vs. exterior space, public vs. private space, community vs. the individual, and traditional vs. non-traditional families. The studio focus is divided between the single-family dwelling and multipleunit housing typologies. Six Unit Studio. Prerequisite: ARCH 281, Design Studio 2A

## **Course Description**

For the fall, 2019 *3A: House and Housing* studio students and faculty will be exploring the trajectory from individual human inhabitation to dense communal living—from inside to outside, from collection to aggregation, from nesting to hatching. Both terms, nesting and hatching, offer useful double meanings for the exploration of architecture that learns from both human and community scales. As a noun *nest* designates "a place or specially modified structure serving as an abode of animals and especially of their immature stages" while as a verb it means "to fit compactly together or within one another" or "settle in." *Hatch*, similarly, works as a noun in terms of "a small door or opening" and as a verb meaning "to produce young by incubation" and "to mark (something, such as a drawing or engraving) with fine closely spaced lines." During this semester we will probe, analyze, research, draw, and question the multiple implications of nesting and hatching architecture as inherently domestic and communal design practices.

This semester the housing studio also will take this rather broad approach to the design of housing into the more specific research areas that respond to the Dean's call for "Housing Plus." Each of the four instructors with add a layer of conceptual inquiry to their studio that delivers a clinamen, or swerve, to the orthodoxies enumerated above. These plus signs will involve the utopian vision for a Los Angeles with substantially reduced automobile ownership and use. What will we do with all of the extra space liberated from the demands of cars? How might we repurpose and densify the areas once inhabited by vehicular uses to address the city's housing shortage? How big is a car and how much infrastructure does it occupy? In order to research "Innovative Housing Typologies" and to advocate for the policy, procedural and regulatory reforms, un-parking the city and replacing it with human inhabitation becomes the focus of this semester.

## Learning Outcomes

Upon completion of this course, it is expected that students will be able to:

- o use basic organizational principles to inform dimensional design.
- o use basic environmental principles to inform design
- o apply natural and formal ordering systems to inform design
- translate precedents into architecture and urban design
- o respond to site's physical and cultural context
- o represent inhabitation at multiple scales
- o diagram their work
- manifest critical thinking in design

## NAAB Student Performance Criteria Mastered

A.4: Architectural Design Skills

Ability to effectively use basic formal, organizational and environmental principles and the capacity of each to inform two- and three-dimensional design.

A.5: Ordering Systems

Ability to apply the fundamentals of both natural and formal ordering systems and the capacity of each to inform two- and three-dimensional design. A.6: Use of Precedents

Ability to examine and comprehend the fundamental principles present in relevant precedents and to make informed choices regarding the incorporation of such principles into architecture and urban design projects.

B.2: Site Design

Ability to respond to site characteristics including urban context and developmental patterning, historical fabric, soil, topography, climate, building orientation, and watershed in the development of a project design.

## NAAB Student Performance Criteria Introduced

A.2: Design Thinking Skills

Ability to raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, reach well-reasoned conclusions, and test alternative outcomes against relevant criteria and standards.

## A.3: Investigative Skills

Ability to gather, assess, record, and comparatively evaluate relevant information and performance in order to support conclusions related to a specific project or assignment.

## A.8: Cultural Diversity and Social Equity

Understanding of the diverse needs, values, behavioral norms, physical abilities, and social and spatial patterns that characterize different cultures and individuals and the responsibility of the architect to ensure equity of access to buildings and structures.

## B.1: Pre-Design

Ability to prepare a comprehensive program for an architectural project, which must include an assessment of client and user needs, an inventory of spaces and their requirements, an analysis of site conditions (including existing buildings), a review of the relevant building codes and standards, including relevant sustainability requirements, and assessment of their implications for the project, and a definition of site selection and design assessment criteria.

## **B.3: Codes and Regulations**

Ability to design sites, facilities and systems consistent with the principles of life-safety standards, accessibility standards, and other codes and regulations.

C.1: Research

Understanding of the theoretical and applied research methodologies and practices used during the design process.

## Final Grade Calculation, Assignments, and Assessment

%25 Assignment 01: ADU
%10 Assignment #2: Nest
%10 Assignment #3: Los Angeles Housing Precedents
%20 Assignment #4: Site Analysis-Design
%30 Assignment #5: Multiple Units Design
%05 Lecture Series Attendance

## Estimate of Costs

It is estimated that each student will spend approximately \$500 on materials, printing, fabrication and field trip costs.

## **Moodle Policy**

Students are required to use Moodle as their primary form of course communication.

## LECTURE SERIES ATTENDANCE IS MANDATORY

## **Schedule and Deliverables**

(subject to change or revision depending on student progress and unanticipated events)

Week One		
T August 20	Distribute Assignment 01: ADU	
	Faculty lecture on small dwelling units	
F August 23	Document assigned ADU in field	
	Read: Part of the Solution: Yes to ADU	
Week Two		
T August 27	Lecture: Los Angeles vernacular and historic housing	
	traditions	
F August 30	ADU Site Documentation Due + study model @ 1/8"	
Week Three		
T September 03	ADU pin up plan and section	
F September 06	Wall paper <i>charrette</i>	

Week Four	
T September 10	
F September 13	Assignment #1 Due
	Distribute Assignment #2: Magpie's Nest
Week Five	
T September 17	Preliminary nest due
F September 20	Pin-up
Week Six	
T September 24	Assignment #2 Due
	Distribute Assignment #3: Los Angeles Housing Precedents
	Lecture: Los Angeles Housing Typologies
	Lecture: Diagramming
F September 27	
Week Seven	
T October 01	Lecture, 6:30pm Housing +: 'Frontier Housing' symposium
F October 04	Assignment #3 Due
	Distribute Assignment #4: Site Analysis-Design
	be prepared to discuss in class Singley: How to Read Architecture
	chapter on <i>Terroir</i>
Week Eight	
T October 08	Site Visit/Documentation
F October 11	Pin up site documentation and site analysis
	Lecture on thick skins/wrappers
Week Nine	
T October 15	Pin-up: Deploy Nest and ADU into preliminary site design
F October 18	
Week len	
T October 22	Assignment #4 Due
	Distribute Assignment #5: Multiple Unit Design
	Lecture: Expressive Model Making
F October 25	
Week Eleven	
T October 29	Detailed Massing Model Due and CC&Rs
F November 01	
Week Twelve	
T November 05	Lecture Expressive Drawing,

W November 08	6:30pm Jennifer Bonner and Germane Barnes Detailed Plans and Sections Due
Week Thirteen	
T November 12	Unit Designs Due
F November 15	Generative Diagrams Due
Week Fourteen	
T November 19	
F November 22	
Week Fifteen	
T November 26	
F November 29 No Cla	ass (Thursday—Friday, November 28-29, Thanksgiving)
Week Sixteen	Final Review Week
T December 03	
F December 06	

Fall 2019 Lecture Series

1 October, 6:30pm Housing +: 'Frontier Housing' symposium

5 November, 6:30pm Jennifer Bonner and Germane Barnes

Faculty Lunch Lecture T.B.A.

## DEPARTMENT POLICIES AND PROCEDURES

# Requirements for Documentation and Archiving

Each student must submit documentation of the full semester's work at the end of each term, in pdf format. Materials should include research, writing, and design work, including important study models and sketches. Studio faculty will further define how this work should be organized and presented before the end of the semester. Failure to submit the required documentation in usable format may result in a grade reduction in the final grade of the semester. Documentation of the studio work is essential for the NAAB accreditation process and assessment of the architecture program.

The university reserves the right to retain student work for archival purposes. Projects/models, assignments, and exams will be kept at the department's discretion for this purpose. Students will be asked to help with archiving their projects at the end of the semester.

## Writing Requirements

All written work must meet the standards for English. Poorly written papers may be returned without a grade for revision and resubmission, and may be subject to grade reduction. Students are encouraged to utilize the Woodbury Writing Center. Link is <u>here</u>.

## Studio Culture

The studio environment is an essential component in learning to become an architect. One goal of the School of Architecture is to create a vibrant, exploratory, safe and respectful learning culture for students. Only through respect between faculty and students, as well as students among themselves, can a healthy educational studio culture be fostered. Students are required to uphold high standards of behavior and academic discipline while in the studio. See the full Studio Guidelines and Studio Culture Policy for more information.

School Policy on Social Equity and Diversity Our mission is to provide an environment where people can learn, teach and work with a shared sense of purpose, core values and respect without bias towards individual beliefs, values and areas of difference. We do this in an effort to create a community that respects and values the full and equal inclusion of its members. Our goal is to provide an environment that is welcoming and inclusive of all.

## Universal Pedagogy

Woodbury University is committed to making reasonable accommodations to assist individuals with disabilities in reaching their academic potential. Students desiring accommodations due to a physical, learning or psychological disability must first complete an Accommodations Request Form, which can be downloaded here, and found under "Academic Resources." Accommodations cannot be granted prior to the instructor's receipt of a Notification of Special Needs Release Form from the **Disabilities Coordinator. Accommodations** are never provided retroactively. (For more information, contact the Disabilities Coordinator (818) 394-3345.)

## Academic Honesty

Students are responsible for familiarizing themselves with Woodbury's Student Code

of Conduct, which can be found in the Catalog. Academic misconduct, dishonesty, plagiarism, and cheating will not be tolerated and may lead to failure of the course.

## Grade Requirements

Refer to the Woodbury University catalog for grading standards and policies.

Environmental Responsibility Studio projects shall be designed in a socially and environmentally responsible manner. All projects should reduce dependencies on non-renewable resources.

## **Class Attendance**

It is mandatory that students take advantage of all scheduled course time. Regular attendance at EVERY class is expected throughout the duration of the class/studio time. Arrival at the beginning of the class period is required. Lateness or early departure will be considered as an absence. 'Regular and prompt attendance at all university classes is required. The instructor is not obligated to assign extra work or to prepare additional examinations for classes missed. It is understood that when 15% of the class time has been missed, the student's absence rate is excessive. Each instructor will announce his/her attendance policy in the course syllabus.

## Excused Absence

Students should report any illness or emergency to their course instructor, preferably before missing the class, by emailing the instructor. Written documentation (doctor's note, etc.) is required for an excused absence, and should be submitted to the instructor at the next class meeting. Extended absence due to medical issues, family issues, etc. should be reported to the Dean of Students' office for appropriate documentation.

Students who anticipate absence due to religious observance or similar commitments should speak with their instructor at the start of the term to review all dates in question and develop a plan to meet all course requirements.

## Email

Students are advised to meet with their instructors during posted office hours. Faceto-face communication in discussing and resolving problems is preferable to email exchanges. Additionally, meetings must be scheduled in advance using email correspondence. Email correspondence must be written in a respectful and professional manner. It is the student's responsibility to consistently check for email.

## **Grievance Protocol**

Students should use the following protocol for questions, grievances, or general concerns about coursework and the studio environment. Health and safety concerns and emergencies should immediately be directed to campus security (818-252-5208). Academic concerns should be directed first to the student's instructor, and then to the studio coordinator as appropriate. If further consultation is required, the student is advised to meet with the Coordinator and/or the Chair (Marc Neveu, both Undergraduate and Graduate).

Class Syllabus and Structure While every effort will be made to follow the outline of the published syllabus, course structure and calendar may be changed at the instructor or coordinator's discretion. Announcements will be made if such Calculation Of Grade changes occur. Students who miss class are responsible for tracking any such announcements.

Letter grades are converted to numeric values using the following values:

Letter	GPA	%	Definition
A	4.00- 3.84	96-100	Student learning and accomplishment far exceeds published objectives for the
A-	3.83- 3.50	92-95	course/test/assignment and student work is distinguished consistently by is high level of competency and/or innovation.
B+	3.49- 3.17	88-91	Student learning and accomplishment goes beyond what is expected in the published objectives for
В	3.16- 2.84	84-87	the course/test/assignment and student work is frequently characterized by its special depth of understanding, development, and/or innovative experimentation.
В-	2.83- 2.50	80-83	Students learning and accomplishment meets all published objectives for the
C+	2.49- 2.17	76-79	<ul> <li>course/test/assignment and the student work</li> <li>demonstrates the expected level of understanding,</li> <li>and application of concepts introduced.</li> </ul>
С	2.16- 1.84	72-75	
C-	1.83- 1.50	68-71	Student learning and accomplishment based on the published objectives for the
D+	1.49- 1.17	64-67	course/test/assignment were met with minimum passing achievement.
D	1.16- 0.60	60-63	
F	0.00- 0.60	< 60	Student learning and accomplishment based on the published objectives for the course/test/assignment were not sufficiently addressed nor met.

## Woodbury University School of Architecture Studio 4A ARCH 487

Semester: Fall 2019

Time: Tuesday / Friday 1:15-6:15 pm

Location:

Instructors: Matthew Gillis, Stephen Marshall, Eric Olsen, Linda Taalman

Office hours: e-mail instructor for appointment

#### **Catalog Description**

Students produce a comprehensive architectural project based upon a building program and site that includes the development of programmed space, demonstrating an understanding of structural and environmental systems, life-safety provisions, wall sections, building assemblies, and the principles of sustainability. The studio is open to fourth- and fifth-year students. The last half of the semester will be devoted to design development.

Six unit Studio. Prerequisites: ARCH 384, Studio 3B, ARCH 326, Structures 1; and ARCH 425, Environmental Systems. Corequisite: ARCH 464 Systems Integration.

#### Learning Outcomes

Upon completion of this course, it is expected that students will be able to:

- 1. Conceptualize well thought out design solutions, in response to specific site and passive design considerations, incorporating techniques of siting, massing, orientation and passive heating and cooling.
- Develop through Representations (visualizations and modeling) design decisions and design strategies for the integration of building systems, specifically with regards to the design development of building envelope, materials and assemblies and services that serve and integrate with primary circulation, structure and active systems.
- Design and Document a Comprehensive project taking into consideration precedents, local codes and regulations, and the selection and integration of appropriate building systems. Documentation to include clear technical documentation of the project including site and floor plans, sections and elevations and detailed wall sections.
- 4. Develop an understanding of an Integrative Design Approach, and a holistic understanding of the interrelationship of systems in the execution of a complex architectural project that is mindful of the environment and sustainability.
- 5. Use critical thinking skills and problem solving learned in all previous design studios to design a building that responds to contemporary and relevant social and civic problems facing the profession of architecture today.

#### NAAB Student Performance Criteria Mastered

#### B.2: Site Design

Ability to respond to site characteristics including urban context and developmental patterning, historical fabric, soil, topography, climate, building orientation, and watershed in the development of a project design.

#### **B.3: Codes and Regulations**

Ability to design sites, facilities and systems consistent with the principles of lifesafety standards, accessibility standards, and other codes and regulations.

#### **B.4: Technical Documentation**

Ability to make technically clear drawings, prepare outline specifications, and construct models illustrating and identifying the assembly of materials, systems, and components appropriate for a building design.

#### C.2: Integrative Evaluation and Decision-Making Design Processes

Ability to demonstrate the skills associated with making integrated decisions across multiple systems and variables in the completion of a design project. This demonstration includes problem identification, setting evaluative criteria, analyzing solutions, and predicting the effectiveness of implementation.

#### C.3: Integrative Design

Ability to make design decisions within a complex architectural project while demonstrating broad integration and consideration of environmental stewardship, technical documentation, accessibility, site conditions, life safety, environmental systems, structural systems, and building envelope systems and assemblies.

## Course Description

This year's Studio 4A will focus on the questioning of how technological developments affect architecture both programmatically and performatively through the problem of housing and the effects of climate change on our environment. Each studio will take on a specific site and approach to this civic institution.

The studio will question how architecture and the built environment play a role in shaping our behavior as much as it is a container for controlling climate. The integration of technology and the design of our spaces intersect to create new experiences and environments.

Studio 4A is the Comprehensive Design Studio, in which students will develop a complex architectural project to a design development level that culminates in a highly detailed documentation of their design. Each project is expected to incorporate the essential aspects of design – site, circulation, structural and environmental systems with more detailed and integrated design decisions in terms of building envelope, building material and building service systems. The framework of the studio is rigorous in its effort to guide the student to this advanced level of development and the pace of the studio rapidly progresses from conceptualization to design development. Students' projects are expected to incorporate a technical level of detail and understanding, from local codes and regulations, including ADA and life safety, to conventions of architectural documentation, including detailed drawings and specifications. The studio will make use of multiple methodologies of design in the visualization and development of the projects, incorporating projective and axonometric drawings, physical and digital modeling, and graphic representations.

Studio 4A is developed in tandem with the ARCH 464 Systems Integration course and together they integrate the tools and knowledge necessary to develop a fully integrative Comprehensive Design project. Through lectures, in-class critiques and consultant round tables the studio and seminar will introduce the students to a spectrum of design and engineering professionals, giving students the opportunity to have direct feedback on their design projects.

## Schedule and Deliverables

Schedule and deliverables subject to change. September 17- Concept Design presentation (Assignment 1) October 18- Midterm presentation: Building Design (Assignment 2) November 15- Design documentation presentation (Assignment 3) December 6- Studio Final presentation (incorporates Ass. 1-3 and Final Presentation req.)

## Final Grade Calculation

- 20% Concept Design
- 20% Midterm Presentation
- 20% Design Documentation
- 30% Final Presentation
- 10% Overall development, Attendance and Participation in studio

## **Assignments and Assessment**

The Assignments progress quickly from conceptualizing to building design and detailed development of the project to produce a highly resolved and comprehensive project. Each Assignment and sub part build on the last and adds a level of complexity and further re-evaluation to produce a thoughtful integrated solution.

Assignment 1: Concept Design

• Students will conceptually develop the site and program given through critical analysis of precedents, analysis of the site, passive design in response to the site conditions, and thoughtful development of the program into clear massing strategies.

This assignment consists of 3 key parts

Part 1: Precedent Research Analysis (plan, section and 3d)

Part 2: Site model and Site diagrams

Part 3: Program and Massing diagrams and models

- Learning outcomes 1 and 2 and NAAB criteria B.2 (Site Design), C.2 (Integrative Evaluation and Decision-Making Design Processes) and C.3 (Integrative Design)
- Assessment/grading criteria used to generate grading rubrics.

Criteria below will be used in a matrix that is aligned with each sub assignment

- 1) Analysis and Research (LO 1)
- Develops clear Conceptual strategies in response to site and precedent, develops clear passive design strategies of massing, orientation and passive heating and cooling (NAAB B.2, LO 2)
- 3) Clear integrative approach and design decision making (NAAB C.2)
- 4) Integrative design approach- integration of multiple strategies in the creation of a holistic design (NAAB C.3)

Assignment 2: Building and Envelope Design

• Students will develop their project into a building taking into consideration the primary physical and spatial systems of architecture- circulation, structure, envelope and active systems. The physical integration of these primary systems with the Concept Design and their compatibility with the site and passive design strategies is the key objective.

This assignment consists of 3 key parts

Part 1: Building Circulation diagrams and models

Part 2: Building Structural diagrams and models

- Part 3: Envelope diagrams and models describing spatial and systems strategies
- Learning outcomes 3 and NAAB criteria C.2 (Integrative Evaluation and Decision-Making Design Processes) and C.3 (Integrative Design)

• Assessment/grading criteria used to generate grading rubrics.

Criteria below will be used in a matrix that is aligned with each sub assignment

- 1) Develops the project through representation of a clear building design that successfully integrates the primary physical systems with the conceptual design (LO 3)
- 2) Conceptual Building Envelope responds appropriately to site and design criteria, and passive design goals (NAAB B.2, LO 3)
- 3) Clear integrative approach and design decision making (NAAB C.2)
- 4) Integrative design approach- integration of multiple strategies in the creation of a holistic design (NAAB C.3)

Assignment 3: Design Documentation

• Students will develop their project into a building taking into consideration the primary physical and spatial systems of architecture- circulation, structure, envelope and active systems. The physical integration of these primary systems with the Concept Design and their compatibility with the site and passive design strategies is the key objective.

This assignment is focused on the completion of the primary design documentation for the project as a series of black and white architectural drawings that clearly articulate the project.

- Part 1: Design Documentation
- Site Plan, Floor Plans, Elevations and Sections Part 2: Material Strategies and detail
- Detailed wall sections
- Material studies
- Learning outcomes 3 and 4 and NAAB criteria B.3 (Codes and Regulations) and B.4 (Technical Documentation)
- Assessment/grading criteria used to generate grading rubrics.

Criteria below will be used in a matrix that is aligned with each sub assignment

- 1) Develops the project through clear drawings that describe a developed building design successfully integrating all the systems into an architectural project (LO 3)
- Project successfully demonstrates ability to apply local codes and regulations in the building design and the development of plans, sections and elevations and selection of the appropriate building systems (LO 4 and NAAB B.3)
- 3) Detailed technical documentation of the project through technical drawings (NAAB B.4)

Assignment 4: Final Presentation

 The final presentation compiles and presents the work of the semester alongside a culminating large-scale model. A final model of the proposed project demonstrates the comprehensive qualities of the project and is intended to articulate the interrelationships between the site and building and the integration of primary and detailed building systems.

The final assignment consists of the following parts

- Final Presentation: Assignment 1-3 combined and large-scale sectional model of project
- The final presentation will be a comprehensive evaluation of the work of the entire semester and will be graded on the basis of all 5 Learning Outcomes for this course and NAAB Criteria B.3, B.4, C.2, and C.3
- Assessment/grading criteria used to generate grading rubrics.

Criteria below will be used in a matrix that is aligned with each sub assignment

- 1) Analysis and Research (LO 1)
- 2) Develops clear Conceptual strategies in response to site, develops clear passive design strategies of massing, orientation and passive heating and cooling (LO 2)
- 3) Develops the project through representation of a clear building design that successfully integrates the primary physical systems with the conceptual design (LO 3)
- 4) Conceptual Building Envelope responds appropriately to site and design criteria, and passive design goals (LO 3)
- 5) Develops the project through clear drawings that describe a developed building design successfully integrating all the systems into an architectural project (LO 3)
- 6) Project successfully demonstrates ability to apply local codes and regulations in the building design and the development of plans, sections and elevations and selection of the appropriate building systems (LO 4 and NAAB B.3)
- 7) Detailed technical documentation of the project through technical drawings (NAAB B.4)
- 8) Clear integrative approach and design decision making (NAAB C.2)
- 9) Integrative design approach- integration of multiple strategies in the creation of a holistic design (LO5 and NAAB C.3)

#### Estimate of Costs

Students should expect to expend the necessary resources to produce drafts and final for each subpart of the Assignment. Printing costs are dependent on current printing and plotting costs established by the university (please see labs) and specific design solutions and material requirements for modeling materials. Estimated printing and model making costs detailed below.

Printing budget- \$500 Model making costs- \$500

#### Attendance Policy

Students are expected to attend each session of studio to not miss key assignments, presentations, discussions and critique. It is impossible to make up a studio session- particularly when guests are visiting studio for discussions and critiques or for key presentations. If a presentation is missed the material intended to be presented on that date must be submitted complete to Moodle on the due date, and physically presented at the next class session.

#### **Moodle Policy**

Assignments will be posted to Moodle; students are expected to download reading materials from Moodle according to the schedule and must be prepared to discuss these materials in class. Students are responsible for posting all assignments to Moodle by the assignment due date.

#### DEPARTMENT POLICIES AND PROCEDURES

#### Requirements for Documentation and Archiving Each student must submit documentation of the full semester's work at the end of each term, in pdf format. Materials should include research, writing, and design work, including important study models and sketches. Studio faculty will further define how this work should be organized and presented before the end of the semester. Failure to submit the required documentation in usable format may result in a grade reduction in the final grade of the semester. Documentation of the studio work is essential for the NAAB accreditation process and assessment of the architecture program.

The university reserves the right to retain student work for archival purposes. Projects/models, assignments, and exams will be kept at the department's discretion for this purpose. Students will be asked to help with archiving their projects at the end of the semester.

#### Writing Requirements

All written work must meet the standards for English. Poorly written papers may be returned without a grade for revision and resubmission, and may be subject to grade reduction. Students are encouraged to utilize the Woodbury Writing Center. Link is <u>here</u>.

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#### **Grade Requirements**

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#### **Environmental Responsibility**

Studio projects shall be designed in a socially and environmentally responsible manner. All projects should reduce dependencies on non-renewable resources.

#### **Class Attendance**

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#### Excused Absence

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#### **Grievance Protocol**

Students should use the following protocol for questions, grievances, or general concerns about coursework and the studio environment. Health and safety concerns and emergencies should immediately be directed to campus security (818-252-5208). Academic concerns should be directed first to the student's instructor, and then to the studio coordinator as appropriate. If further consultation is required, the student is advised to meet with the Coordinator and/or the Chair (Marc Neveu, both Undergraduate and Graduate).

#### **Class Syllabus and Structure**

While every effort will be made to follow the outline of the published syllabus, course structure and calendar may be changed at the instructor or coordinator's discretion. Announcements will be made if such changes occur. Students who miss class are responsible for tracking any such announcements.

#### Calculation Of Grade

Letter grades are converted to numeric values using the following values:

Letter	GPA	%	Definition
А	4.00-3.84	96-100	Student learning and accomplishment far exceeds published objectives for the course/test/assignment and student work is distinguished consistently by is high level of competency and/or innovation.
A-	3.83-3.50	92-95	
B+	3.49-3.17	88-91	Student learning and accomplishment goes beyond what is expected in the published objectives for the course/test/assignment and student
В	3.16-2.84	84-87	work is frequently characterized by its special depth of understanding, development, and/or innovative experimentation.
B-	2.83-2.50	80-83	Students learning and accomplishment meets all published objectives for the course/test/assignment and the student work demonstrates the expected level of understanding, and application of concepts introduced.
C+	2.49-2.17	76-79	
С	2.16-1.84	72-75	
C-	1.83-1.50	68-71	Student learning and accomplishment based on the published objectives for the course/test/assignment were met with minimum
D+	1.49-1.17	64-67	passing achievement.
D	1.16-0.60	60-63	
F	0.00-0.60	< 60	Student learning and accomplishment based on the published objectives for the course/test/assignment were not sufficiently addressed nor met.

#### Woodbury University School of Architecture

## Professional Practice II - Research and Pre-Design

ARCH 448

Semester:	Fall 2018
Time:	Wednesday 1:00-3:30 pm
Location:	Computer Lab (TBD)
Instructors:	Mark Ericson
Office hours:	Wednesday 10-12pm
	Friday 10-12pm

## Catalog Description

Theory and techniques for analyzing and integrating design methodologies, client or user needs, and site conditions into criteria for an architectural project are studied. The theoretical and practical context for the degree project is researched and developed. Along with the completion of a sub-stantiated written position of intent, a project site is selected, program written and design methodology articulated. Lecture, three hours a week.

Three Unit Lecture. Prerequisites: ARCH 250, Professional Practice I and ARCH 330, Theory of Architecture.

#### Learning Outcomes

Upon completion of this course, it is expected that students will be able to:

L1. Propose a research agenda and the architectural discourse within which it is situated.

L2. Analyze a set of project constraints (site, program, etc.) so that their role in the proposed project is clear and they are represented in a way that enables that role.

L3. Verbally and visually articulate the ways in which a theoretical intention can be translated into precise architectural, formal, and aesthetic terms.

NAAB Student Performance Criteria

A.1: Professional Communication

Ability to write and speak effectively and use appropriate representational media with peers and with the general public.

B.1: Pre-Design

Ability to prepare a comprehensive program for an architectural project, which must include an assessment of client and user needs, an inventory of spaces and their requirements, an analysis of site conditions (including existing buildings), a review of the relevant building codes and standards, including relevant sustainability requirements, and assessment of their implications for the project, and a definition of site selection and design assessment criteria

#### C.1: Research

Understanding of the theoretical and applied research methodologies and practices used during the design process.

WASC Core Competencies

IL: Information Literacy

WC: Written Communication



Robert Ross, Liminal Forms, Spring 2017

## ORDINARY GEOMETRY

Notice that I have been able to describe the fantastic worlds above imagined without ceasing to employ the language of ordinary geometry.

(Henri Poincare, Science and Hypothesis, 1902)

In architecture, there is no more ordinary geometry than orthographic projection. It has existed at least since the 15th century, becoming the definitive geometry of drawing in architecture in the early 16th century.¹ It is the default mode of representation to describe the shape of a building in both built an unbuilt works of architecture. It is also encapsulated in a single command within most modelng software, separating the geometric rules of its assembly from the image that it produces. ² Compared with vast array of other encapsulated geometric operations available to the architect, orthographic projection is frustratingly simple. It is an operation that produces two-dimensional views of a digital model by projecting it perpendicularly onto a plane There is a great deal of graphic work that needs to be done to refine the resultant image into a presentation drawing, but in terms of the geometry very little else happens. At this level, it is not surprising that orthographic projection and its more complex counterpart, descriptive geometry, is rapidly disappearing from the curriculum of most architecture schools.³ It has become so ordinary that its apparently simple tenants no longer need to be explained. As the architect Jane Burry has argued it is probably on its way to joining "reliable ranks of dead and dormant geometries."⁴

"Dead and dormant" is a reference to Robin Evan's description of orthographic projection. Evans argued that a dead geometry is a geometry whose fundamental tenants are no longer the subject of debate. They have been proven beyond doubt and are therefore more useful to the architect because they are an "inoculation against uncertainty".⁵ Orthographic projection's principles are based on Euclid's Elements and in Poincare's terms are "ordinary".⁶ It is the fact that they are are ordinary that makes them so useful in describing things far more complex then themselves. Gothic vault projection, stereotomy, and perspective are other examples of drawing practices founded on the ordinary geometry of Euclid. They have either been replaced by built-in software commands or are simply no longer used at all. Digital technology has augmented and facilitated these techniques, obviating the technical knowledge necessary for their execution. It is no longer necessary to understand the geometric operations behind orthographic or perspectival projection, as they can be readily accessed through standard commands in most architectural software. A perspectival or orthographic projection derived from a software built-in command is as predictable as it is reliable. The commands are designed to be an "inoculation against uncertainty".⁷ However, because they leave behind a great deal of ordinary geometric knowledge they may also be an "inoculation" against the "fantastic".

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This seminar will research and reassemble the dead drawing methods of ordinary geometry. Stereotomy, skiagraphy, orthography, gothic vault design, perspective, axonometry, and other obsolete modes of architectural drawing will be studied first through formal analysis and later through a process of reassembly in digitally animated drawings. The animated drawings will examine the potential of each student's "ordinary geometry" within the digital realm beyond either its historical use or its contemporary implementation. What were once drawing methodologies will become relationships between animated graphical objects. What were once simulations of historical drawing practices will become novel methodologies for the production of form. What were once operations encapsulated in a single word will expand to include the full historical breadth of their architectural expression. Students will be asked to identify a formal disciplinary problem derived from their research into ordinary geometry and linked to their animated drawing. This problem will then be tied to a specific architectural program and site for the spring semester.

3 Burry, Mark. 2011. "Geometry Working beyond Effect." Architectural Design 81 (1): 80–89.

- 5 Evans, Robin. 1995. The Projective Cast: Architecture and Its Three Geometries. Cambridge: MIT Press.
- 6 Poincare, Henri. 1913. Science and Hypothesis. New York: The Science Press.
- 7 Evans, Robin. 1995. The Projective Cast: Architecture and Its Three Geometries. Cambridge: MIT Press.



William Ellsworth, Liminal Forms, Spring 2017

¹ Lefevre, Wolfgang. 2004. "The Emergence of Combined Orthographic Projection." In Picturing Machines 1400-1700, 207–44. Cambridge: MIT Press.

² May, John. 2017. "Everything Is Already an Image." Log, no. 40: 9–26.

⁴ Burry, Jane. 2010. "The Shifting Ground of Architectural Geometry: Getting to Know the New Representational Space." Architectural Theory Review 15 (2–10).188

## STRUCTURE:

Because of the present lack of experience and precedent with issues of motion in architecture, these issues might best be raised from within the technological regimes of the tools rather than from within architectural history.

#### (Greg Lynn, Animate Form, 1999)

Following the very tight alignment of postmodern architects with theorists, there has been a schism between design and history/theory that roughly corresponds to the emergence and integration of digital media in the architectural field...History repeated itself like so many Architectural Design special issues, with happy accidents rediscovered over and over again while mindless variety was celebrated for its own sake, without theoretical, cultural, artistic or disciplinary criteria.

#### (Greg Lynn, Archeology of the Digital, 2013)

These two passages by Greg Lynn, roughly fourteen years apart, are indexical of some of the pitfalls of an architectural project that takes instrumentality and geometry as its primary subject matters. The first text has Lynn as an early adopter of digital technology relegating history to the periphery, and the latter version has Lynn problematizing that position. Paradoxically, Lynn used historical references and disciplinary criteria throughout his work and writing. His canonical analysis of the digital spline curve built in relationship to baroque compound curvature.

In order to tie the research of the semester to the discipline of architecture, the seminar will use Albert's six elements of architecture to structure the research into drawing methodologies. The research will extend over 3 phases of the semester corresponding to each of the grades reviews. The work for the semester will be organized into a folio demonstrating the cumulative body of work for the semester. In addition to the folio students will produce a single animated drawing that results in the production of a three-dimensional form. Successful completion of the semester is contingent upon the completion of each of the three phases, the folio, and the animation

#### 1_Instrumental Research

The development of a project on the relationship between geometry and architecture requires a two-fold approach. It requires research into the means and methods by which certain forms are produced. It also requires that the means and methods be related back to an architectural dilemma. In order to structure this approach, students will engage in a set of workshops over a four week period in which orthographic projection will be translated into digitally animated drawings. In tandem with this students will begin to build a catalog of drawing methodologies tied to each of Alberti's six elements of architecture: area, locality, compartition, wall, roof, opening, and stair. The conclusion of the first phase of research will result in an understanding of the principles of animating geometric operations and an area of focus generated by the catalog.

#### 2_Disciplinary Research

Beginning with the area of focus identified in the first phase students will perform a formal analysis on a specific drawing. The goal of the exercise will be for students to understand every aspect of the drawing and be able to reproduce it independent of the original. After the formal analysis is completed students will use the information to begin building a digitally animated version of the drawing. In tandem with this continued instrumental research, students will begin to develop an argument that ties the method of drawing to a specific architectural problem related to the element that it is associated with in the catalog. An example of this might be looking at the role of helicoidal geometry in the production stairs, and developing an argument that prioritizes the role of circulation over the division of space.

#### 3_Ordinary Proposal

The last phase of the research will result in the solidification of an argument and proposal that will guide the work during the spring semester. Central to this will be the expansion of the argument beyond the specific methodology under investigation. Students will be asked to relate the research to the larger discipline by referencing both contemporary and historical figures that have dealt with similar issues. The animation will be finalized and a test will be performed in the production of small model. Lastly, students will be asked to identify and analyze a program and site for the development of the project.



Brandin Babin, Liminal Forms, Spring 2017

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#### COURSE BIBLIOGRAPHY:

The intent of this bibliography is to provide a starting point for each students research. Some of these texts will be assigned during the course of the semester. Copies of assigned readings will be provided on moodle. Students are encouraged to use this list as a starting point for more in depth research tied towards their specific lines of inquiry. Copies of books that are in the possession of the Library will made available at the reserve desk under the name of this course.

Alberti, Leon Battista. The Art of Buildng in Ten Books. Translated by Joseph Rykwert, Neal Leach, and Robert Tavenor. Cambridge: MIT Press, 1988.

Bruegmann, Robert. "The Pencil and the Electronic Sketchboard : Architectural Representation and the Computer." In Architecture and Its Image : Four Centuries of Architectural Representation : Works from the Collection of the Canadian Centre for Architecture, edited by Eve Blau and Edward Kaufman. Cambridge: MIT Press, 1989.

Bryon, Hilary. "Revolutions in Space: Parallel Projections in the Early Modern Era." Arq 12, no. 3/4 (2008): 337–47.

Burry, Jane. "The Shifting Ground of Architectural Geometry: Getting to Know the New Representational Space." Architectural Theory Review 15, no. 2–10 (2010).

Burry, Mark. "Geometry Working beyond Effect." Architectural Design 81, no. 1 (August 2011): 80–89.

Burry, Mark. "Architecture and Practical Design Computation." In Computational Design Thinking. AD Reader. London: Wiley, 2011.

Cache, Bernard. "A Plea for Euclid." In Projectiles. Architecture Words 6. London: AA Publications, 2011.

-------. Projectiles. Architecture Words 6. London: AA Publications, 2011.

Cache, Bernard. "THE TOWER OF THE WINDS OF ANDRONIKOS OF KYRROS: An Inaugural and Surprisingly Contemporary Building." The Architecture Theory Review 14, no. 1-09 (2009): 4–18.

Cache, Bernard. "Towards a Non-Standard Mode of Production." In Projectiles, 60–73. Architecture Words 6. London: AA Publications, 2011.

Carpo, Mario. "Alberti's Media Lab." In Persepctive, Projections, & Design: Technologies of Architectural Representation, edited by Lemerle, Frederique and Mario Carpo. New York: Routledge, 2008.

Carpo, Mario. The Alphabet and the Algorithm. Writing Architecture. Cambridge, Mass.: MIT Press, 2011. http://mitpress-ebooks.mit.edu/product/alphabet-algorithm21655.

Carpo, Mario. The Digital Turn in Architecture 1992-2012. AD Reader. Chichester: Wiley, 2013.

Carpo, Mario, and Lemerle, Frederique. Persepctive, Projections, & Design: Technologies of Architectural Representation. New York: Routledge, 2008.

Clifford, Brandon, and Wes Mcgee. La Voûte de LeFevre, 2013.

Cohen, Preston Scott. Contested Symmetries and Other Predicaments in Architecture. New York: Princeton Architectural Press, 2001.

Durer, Albrecht. The Painters Manual. Translated by Walter Strauss. New York: Abaris, 1977.

Eduardo Catalano, and Louise Pelletier. The Structure of Warped Surfaces. University of North Carolina Press, 1960.

Euclid. The Thirteen Books of Euclid's Elements. Translated by Thomas Heath. Digireads, 2010.

Evans, Robin. "Architectural Projection." In Architecture and Its Image: Four Centuries of Architec-



Dajshey Chatman, Liminal Forms, Spring 2017
tural Representation, edited by Eve Blau. Canadian Center For Architecture, 1989.

------. The Projective Cast: Architecture and Its Three Geometries. Cambridge: MIT Press, 1995.

------. "Translations from Drawing to Buildings." In Translations from Drawing to Building, 153–89. Cambridge: MIT Press, 1997.

Fabrizio Ballabio. "Snails and Hawkwings." AA Files, no. 61 (2014): 107-17.

Hersey, George L. Architecture and Geometry in The Age of the Baroque. Chicago: University of Chicago Press, 2000.

Hilbert, D., and S. Cohn-Vossen. Geometry and The Imagination. New York: Chelsea, 1952.

Kelly Bair, and Kristy Balliet. "The Next Port of Call." Log, no. 37 (Summer 2016): 127–38.

Kipnis, Jeffrey. A Question of Qualities. Writing Architecture. Cambridge: MIT Press, 2013.

Kipnis, Jeffrey. Perfect Acts of Architecture. New York: Museum of Modern Art, 2001.

Kipnis, Jeffrey. "Toward a New Architecture." In A Question of Qualities, 287–320. Writing Architecture. Cambridge: MIT Press, 2013.

Lefevre, Wolfgang. Picturing Machines 1400-1700. Cambridge: MIT Press, 2004.

Legendre, George. IJP: The Book of Surfaces. London: AA, 2002.

Legendre, George. Mathematical Form. London: AA, 2006.

Lynn, Greg. Animate Form. New York: Princeton Architectural Press, 1999.

------, ed. Archaeology of the Digital. Berlin: Canadian Center For Architecture Sternberg Press, 2013.

———. Folds, Bodies and Blobs Collected Essays. Brussels: La Letrtre Volee, 2004.

------. "Multiplicitous and Organic Bodies." In Folds, Bodies and Blobs Collected Essays, 31–56. Brussels: La Letrtre Volee, 2004.

May, John. "Everything Is Already an Image." Log, no. 40 (2017): 9-26.

Menges, Achim. "Material Computation--Higher Intergration in Morphogenetic Design." Architectural Design 82, no. 2 (2012).

Miller, Kyle. "The Thirteenth Villa." Journal of Architectural Education 07, no. 1 (March 2016): 91–96.

Palladio, Andrea. The Four Books of Architecture. Translated by Isaac Ware. Toronto: Dover, 1738.

Perez-Gomez, Alberto. The Perspective Hinge. Cambridge: MIT Press, 1997.

Picon, Antoine. "Architecture and Mathematics: Between Hubris and Restraint." Architectural Design 81, no. 4 (2011): 28–35.

Pier Vittorio Aureli. "Architecure as a State of Exception." In The Possibility of an Absolute Architecture, 141–76. MIT Press, 2011.

Poincare, Henri. Science and Hypothesis. New York: The Science Press, 1913.

Potie, Phillipe. "Sophisticated Geometry, Baroque Composition." In Persepctive, Projections, & Design: Technologies of Architectural Representation, edited by Lemerle, Frederique and Mario Carpo. New York: Routledge, 2008.

Reiser, Jesse., and Nanako. Umemoto. Atlas of Novel Tectonics. 1st ed. New York: Princeton Architectural Press, 2006. http://catdir.loc.gov/catdir/toc/ecip063/2005034117.html.





Mashael Alsolai, Liminal Forms, Spring 2017

Rippman, Matthias. "Funicular Shell Design: Geometric Approaches to Form Finding and Fabrication of Discrete Funicular Structures." ETH, 2016.

Rowe, Colin. The Mathematics of the Ideal Villa and Other Essays. Cambridge: MIT Press, 1976.

Rudolf Wittkower. Architectural Principles in the Age of Humanism. 3rd ed. London: Norton, 1962.

Sakarovitch, Joel. "Stereotomy, A Multifaceted Technique." In Proceedings of the First International Congress on Construction History. Madrid, 2003.

Sbacchi, Michele. "Euclidism and Theory of Architecture." Network Nexus Journal 3, no. 2 (2001): 25–38.

Scolari, Massimo. Oblique Drawing: A History of Anti-Perspective. Cambridge: MIT Press, 2012.

Sherer, Daniel. "The Architectural Project and the Historical Project: Tensions, Analogies, and Discontinuities." Log 31, no. Spring/Summer (2014): 115–38.

Vitruvius Pollio., and M. H. Morgan. Vitruvius : The Ten Books on Architecture. New York: Dover Publications, 1960.

Wes McGee, and Brandon Clifford. "La Voute de Le Fevre." In Encoding Architecture, n.d.

Witt, Andrew. "Machine Epistemology in Architecture." Translated by Annette Wiethuchter. Candide-Journal for Architectural Knowledge 12, no. 3 (2010): 37–88.

Woodbury, Robert. Elements of Parametric Design. Routledge, 2010.

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Wu, Cameron. "Of Circles and Lines." Log 31, no. Spring/Summer (2014): 107-14.

Young, Michael. "Digital Remediation." The Cornell Journal of Architecture, Mathematics, 9 (2013): 119–34.



Roxana Perez, Liminal Forms, Spring 2017

## ASSIGNMENTS AND ASSESSMENT

Each of the assignments will be evaluated based on the student's successful completion of the course learning outcomes. At the close of each phase and after the review all students will receive a rubric with the following evaluation criteria:

20%_Method: The ability to develop generative design methods that respond to specific architectural

problems.

20%_Argument: The ability to establish a critical position within the specific disciplinary context of the

seminar.

20%_Research: The ability to examine sources beyond the course bibliography and integrate them into

the development of a project proposal.

20%_Craft: The ability to construct clear and precise artifacts that communicate the intent of the project proposal. Including drawings, texts, and objects.

20%_Professionalism: The ability to organize, attend, present, and participate in reviews, lectures, and discussions.

Final Grade Calculation

Review 1: 30%

Review 2: 30%

Review 3: 40%

ESTIMATE OF COSTS

Students should budget approximately \$20 per each week of the semester. This estimate should cover the cost of printing and modeling materials.



Mashael Alsolai, Liminal Forms, Spring 2017

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# ACTIVITIES, PROCESSES, AND ASSIGNMENTS:

Students are expected and required to complete work outside of class through design investigation and research. It is highly recommended that students work in studio to complete this work. Studio is a laboratory of creative thinking. Students who surround themselves with other students working towards the same objective will advance in ways that are not possible if work is done in isolation. Studio discussions and reviews are directed toward the establishment of critical discourse of issues and investigations. Students are expected to be prepared to participate in discussion.

The studio will work in within the following settings:

#### Lecture:

Lectures will take approximately thirty minutes during which time the students and instructor will engage in a discussion regarding the information being presented. Student's verbal participation in lectures is required.

#### Pin-up:

Students must come to each class prepared to present their current work to the instructor and a group of classmates. During pin-ups students and instructors are responsible for engaging in a critical discussion of the work. Active verbal participation is required.

#### Review:

Reviews will consist of oral and graphic presentation of individual projects. Students will be required present a coherent architectural argument at every review. Presentations are not only the evaluation of student progress, but a time of critical discourse between all students and instructors. Student participation is both encouraged and required.

#### Workshop:

Students must come to class with the materials on the required list for all scheduled class times. During workshops specific skills and concepts pertaining to the assignment at hand will be demonstrated and tested. Successful participation and completion of each workshop is required. Workshops will range from digital to manual. As such students are required to come to each class session prepared to work with all of the tools on the supply list.

# Drawing/Printing

All of the drawings done during the course of the semester will be digital. In order to receive feedback and improve on the technical and conceptual aspects of drawing students will be required to print for every class session.

#### Software:

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The seminar will require the use of the following software: Rhino 5 or 6, V-Ray for Rhino, Adobe Illustrator CS6, Abobe In-Design CS6, Adobe Photoshop CS6, Grasshopper (latest build)

#### **Digital Submissions:**

Students will be required to submit PDF of their work at the termination of each of the (3) project phases. Work submitted for these purposes should not exceed 50 mb per file. Failure to submit digital work may impact the final grade for each project. Please use the following naming conventions when submitting digital work:

#### FA18_Arch448_Review #_Lastname.pdf

# EXPECTATIONS AND REQUIREMENTS:

# Attendance:

Students are expected to be on time and present for the entire duration of every class. Each class builds upon the previous one; missing a class will likely lead to falling behind. Arriving to class late or leaving early counts as an absence. Absence, tardiness and lack of participation in class will be

directly reflected in your grade for rigor and completion. (2) absences will result in a "0" for the "Professionalsm" category during the project in which it occurs. (4) or more absences will result in a letter grade deduction for the overall course.

Review / Pin-up preparedness and Participation:

Students are required to attend and participate at critiques, pin-ups and reviews for their full duration. For reviews, work must be pinned up at the designated time and no less than 10 minutes before the scheduled deadline. Students who have not pinned up 10 minutes prior to the deadline will receive a letter grade deduction in the category of "Present" and will not be permitted to present on the day or review. Students must remain at the review for the presentations of the entire class. Failure to remain present will result in a letter grade deduction in the category of "Professional". Students who fail to attend a review will receive a grade of "0" for the Category of "Professionalism"

# SCHEDULE

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(Note: The schedule and the specific content of the assignments are subject to change at the discretion of the instructors.)

v	DATE	ASSIGNMENT	PRODUCTS	READING	OUTCOMES
1	8.22: Lottery/ Intro	1.0: Instrumental Research	Drawing Catalog	(see course bibliogra- phy for full citation) Alberti, The Art of Buildng in Ten Books.	L3,C.1,WC
2	8.29: Workshop/ Pin-up	1.0: Instrumental Research	Drawing Catalog/Work- shop Animation Stills	Burry, Mark. "Archi- tecture and Practical Design Computation."	L3,C.1,WC
3	9.05: Workshop/ Pin-up	1.0: Instrumental Research	Drawing Catalog/Work- shop Animation Stills	May, John. "Every- thing Is Already an Image."	L3,C.1,WC
4	9.14: Work- shop/Pin-up	1.0: Instrumental Research	Drawing Catalog/Work- shop Animation Stills	Burry, Jane. "The Shifting Ground of Ar- chitectural Geometry:	L3,C.1,WC
5	9.19:	REVIEW 1	9 Drawings, Animation, Drawing Catalog, Text		L3,C.1,WC
6	9.26: Lecture	2.0: Disciplinary Research	Formal Analysis Text/ Drawing of 1	Greg Lynn. "Multi- plicitous and Organic Bodies."	L2, C.1,A.1, IL, WC
7	10.03: Discus- sion/Meetings	2.0: Disciplinary Research	Formal Analysis Text/ Drawing Animation	Cache, Bernard. "A Plea for Euclid."	L2, C.1,A.1, IL, WC
8	10.10: Discus- sio/Meetings	2.0: Disciplinary Research	ormal Analysis Text/ Drawing Animation	Student Directed Reading	L2, C.1,A.1, IL, WC
9	10.17: Pin-up	2.0: Disciplinary Research	ormal Analysis Text/ Drawing Animation	Student Directed Reading	L2, C.1,A.1, IL, WC

10	10.24:	REVIEW 2			L2, C.1,A.1, IL, WC
11	10.31: Lecture	3.0: Oridinary Proposal	Establish Continuity// Larger Architectural	Kipnis, Jeffrey "Toward a New Architecture."	L1,L2, L3 C.1,A.1, IL, WC
12	11.07: Discus- sio/Meetings	3.0: Ordinary Proposal	Position Statement with Statement of	Aureli, Pier Vittorio. "Architecture as a	L1,L2, L3 C.1,B.1,A.1, IL, WC
13	11.14: Discus- sio/Meetings	3.0: Ordinary Proposal	Drawing Animation Program Breakdown	Student Directed Reading	L1,L2, L3 C.1,A.1,B.1 IL, WC
14	11.21: Pin-up	3.0: Proposal/Test	Drawing Animation Site Analysiis	Student Directed Reading	L1,L2, L3 C.1,A.1, IL, WC
15	11.28	No Class: Studio Finals			L1,L2, L3 C.1,A.1, IL, WC
16	12.05:	REVIEW 3	Completed folio,Animation, Model		L1,L2, L3 C.1,A.1, IL, WC

#### DEPARTMENT POLICIES AND PROCEDURES

#### **Requirements for Documentation and Archiving**

Each student must submit documentation of the full semester's work at the end of each term, in pdf format. Materials should include research, writing, and design work, including important study models and sketches. Studio faculty will further define how this work should be organized and presented before the end of the semester. Failure to submit the required documentation in usable format may result in a grade reduction in the final grade of the semester. Documentation of the studio work is essential for the NAAB accreditation process and assessment of the architecture program.

The university reserves the right to retain student work for archival purposes. Projects/models, assignments, and exams will be kept at the department's discretion for this purpose. Students will be asked to help with archiving their projects at the end of the semester.

#### Writing Requirements

All written work must meet the standards for English. Poorly written papers may be returned without a grade for revision and resubmission, and may be subject to grade reduction. Students are encouraged to utilize the Woodbury Writing Center. Link is <u>here</u>.

#### Studio Culture

The studio environment is an essential component in learning to become an architect. One goal of the School of Architecture is to create a vibrant, exploratory, safe and respectful learning culture for students. Only through respect between faculty and students, as well as students among themselves, can a healthy educational studio culture be fostered. Students are required to uphold high standards of behavior and academic discipline while in the studio. See the full Studio Guidelines and Studio Culture Policy for more information.

#### School Policy on Social Equity and Diversity

Our mission is to provide an environment where people can learn, teach and work with a shared sense of purpose, core values and respect without bias towards individual beliefs, values and areas of difference. We do this in an effort to create a community that respects and values the full and equal inclusion of its members. Our goal is to provide an environment that is welcoming and inclusive of all.

#### Universal Pedagogy

Woodbury University is committed to making reasonable accommodations to assist individuals with disabilities in reaching their academic potential. Students desiring accommodations due to a physical, learning or psychological disability must first complete an Accommodations Request Form, which can be downloaded here, and found under "Academic Resources." Accommodations cannot be granted prior to the instructor's receipt of a Notification of Special Needs Release Form from the Disabilities Coordinator. Accommodations are never provided retroactively. (For more information, contact the Disabilities Coordinator (818) 394-3345.)

#### Academic Honesty

Students are responsible for familiarizing themselves with Woodbury's Student Code of Conduct, which can be found in the Catalog. Academic misconduct, dishonesty, plagiarism, and cheating will not be tolerated and may lead to failure of the course.

#### Grade Requirements

Refer to the Woodbury University catalog for grading standards and policies.

#### **Environmental Responsibility**

Studio projects shall be designed in a socially and environmentally responsible manner. All projects should reduce dependencies on non-renewable resources.

#### **Class Attendance**

It is mandatory that students take advantage of all scheduled course time. Regular attendance at EVERY class is expected throughout the duration of the class/studio time. Arrival at the beginning of the class period is required. Lateness or early departure will be considered as an absence. 'Regular and prompt attendance at all university classes is required. The instructor is not obligated to assign extra work or to prepare additional examinations for classes missed. It is understood that when 15% of the class time has been missed, the student's absence rate is excessive. Each instructor will announce his/her attendance policy in the course syllabus.

#### Excused Absence

Students should report any illness or emergency to their course instructor, preferably before missing the class, by emailing the instructor. Written documentation (doctor's note, etc.) is required for an excused absence, and should be submitted to the instructor at the next class meeting. Extended absence due to medical issues, family issues, etc. should be reported to the Dean of Students' office for appropriate documentation.

Students who anticipate absence due to religious observance or similar commitments should speak with their instructor at the start of the term to review all dates in question and develop a plan to meet all course requirements.

#### Email

Students are advised to meet with their instructors during posted office hours. Face-to-face communication in discussing and resolving problems is preferable to email exchanges. Additionally, meetings must be scheduled in advance using email correspondence. Email correspondence must be written in a respectful and professional manner. It is the student's responsibility to consistently check for email.

#### Grievance Protocol

Students should use the following protocol for questions, grievances, or general concerns about coursework and the studio environment. Health and safety concerns and emergencies should immediately be directed to campus security (818-252-5208). Academic concerns should be directed first to the student's instructor, and then to the studio coordinator as appropriate. If further consultation is required, the student is advised to meet with the Coordinator and/or the Chair (Marc Neveu, both Undergraduate and Graduate).

#### Class Syllabus and Structure

While every effort will be made to follow the outline of the published syllabus, course structure and calendar may be changed at the instructor or coordinator's discretion. Announcements will be made if such changes occur. Students who miss class are responsible for tracking any such announcements.

#### **Calculation Of Grade**

Letter grades are converted to numeric values using the following values:

Letter	GPA	%	Definition	
А	4.00-3.84	96-100	Student learning and accomplishment far exceeds published objectives for the course/test/assignment and student work is distinguished consistently by is high level of	
A-	3.83-3.50	92-95	competency and/or innovation.	
B+	3.49-3.17	88-91	Student learning and accomplishment goes beyond what is expected in the published objectives for the course/test/assignment and student work is frequently characterized	
В	3.16-2.84	84-87	by its special depth of understanding, development, and/or innovative experimentation.	
B-	2.83-2.50	80-83	Students learning and accomplishment meets all published objectives for the course/test/assignment and the student work demonstrates the expected level of	
C+	2.49-2.17	76-79	understanding, and application of concepts introduced.	
С	2.16-1.84	72-75		
C-	1.83-1.50	68-71	Student learning and accomplishment based on the published objectives for the course/test/assignment were met with minimum passing achievement.	
D+	1.49-1.17	64-67		
D	1.16-0.60	60-63		
F	0.00-0.60	< 60	Student learning and accomplishment based on the published objectives for the course/test/assignment were not sufficiently addressed nor met.	

# Woodbury University School of Architecture Studio 4

**ARCH 589** Graduate Design Studio 4: The Total Building

SEMESTER: Fall 2019 TIME: Tuesday / Friday 9:00am-2:00 pm

# LOCATION: TBD

INSTRUCTORS: Marcel Sanchez Prieto marcel.sanchez@woodbury.edu

# OFFICE HOURS:

e-mail instructor for appointment





Hendrik Petrus Berlage Commodities Exchange (1896-1903)



# CATALOG DESCRIPTION

Credits 6.00. Students are challenged to synthesize architectural considerations, from the conceptual to the tangible, in the comprehensive design of a building. The studio project grows from a strong theoretical base into a response to the complexities of program and site. Accessibility, environmental performance, and life safety are addressed. Emphasis is placed on the integration of building systems with envelope and structure. Material selection is guided by both climate and context and is sensitive to resource conservation. Prerequisites: Graduate Studio

# LEARNING OUTCOMES

Upon completion of this course, it is expected that students will be able to:

1. Analyze historical and contemporary precedents and use these precedents in a unique design project of the students making. Students are expected to critically respond to the precedent examples in the creation of a new design.

Conceptualize well thought out design solutions, in response to specific site and passive design considerations, incorporating techniques of siting, massing, orientation and passive heating and cooling.

- 3. Develop through Representations (visualizations and modeling) design decisions and design strategies for the integration of building systems, specifically with regards to the design development of building envelope, materials and assemblies and services that serve and integrate with primary circulation, structureand active systems.
- 4. Design and Document a Comprehensive project taking into consideration precedents, local codes and regulations, and the selection and integration of appropriate building systems. Documentation to include clear technical documentation of the project including site and floor plans, sections and elevations and detailed wall sections.
- 5. Develop an understanding of an Integrative Design Approach, and a holistic understanding of the interrelationship of systems in the execution of a complex architectural project that is mindful of the environment and sustainability.

# NAAB Student Performance Criteria Mastered

A.4 Architectural Design Skills

Ability to effectively use basic formal, organizational and environmental principles and the capacity of each to inform two- and three-dimensional design.

A.5 Ordering Systems





Ability to apply the fundamentals of both natural and formal ordering systems and the capacity of each to inform two- and three-dimensional design.

## **B.2 Site Design**

Ability to respond to site characteristics including urban context and developmental patterning, historical fabric, soil, topography, climate, building orientation, and watershed in the development of a project design.

#### **B.3 Codes and Regulations**

Ability to design sites, facilities and systems consistent with the principles of life safety standards, accessibility standards, and other codes and regulations.

# **B.4 Technical Documentation**

Ability to make technically clear drawings, prepare outline specifications, and construct models illustrating and identifying the assembly of materials, systems, and components appropriate for a building design.

#### **B.6 Environmental Systems**

Understanding the principles of environmental systems' design, how systems can vary by geographic region, and the tools used for performance assessment. This must include active and passive heating and cooling, indoor air quality, solar systems, lighting systems, and acoustics.

#### **B.7** Building Envelope Systems and Assemblies

Understanding of the basic principles involved in the appropriate selection and application of building envelope systems relative to fundamental performance, aesthetics, moisture transfer, durability, and energy and material resources.

# **B.8 Building Materials and Assemblies**

Understanding of the basic principles utilized in the appropriate selection of interior and exterior construction materials, finishes, products, components and assemblies based on their inherent performance including environmental impact and reuse.

# **B.9 Building Service Systems**

Understanding of the basic principles and appropriate application and performance of building service systems including mechanical, plumbing, electrical, communication, vertical transportation security, and fire protection systems.

# **B.10 Financial Considerations**

Understanding of the fundamentals of building costs, which must include project financing methods and feasibility, construction cost estimating, construction scheduling, operational costs, and life-cycle costs.

# C.2 Integrative Evaluation and Decision-Making Design Process

Ability to demonstrate the skills associated with making integrated decisions across multiple systems and variables in the completion of a design project. This demonstration includes problem identification, setting evaluative criteria, analyzing solutions, and predicting the effectiveness of implementation.

# C.3 Integrative Design

Ability to make design decisions within a complex architectural project while demonstrating broad integration and consideration of environmental stewardship, technical documentation, accessibility, site conditions, life safety, environmental systems, structural systems, and building envelope systems and assemblies.

# **COURSE DESCRIPTION:**

#### Premise:

To understand the shed as a basic condition of shelter addressing fundamental premises of inhabitation is to reconsider the view and impact of architecture holistically. Questioning which modes of dwelling and architectural strategies of shelter could radically innovative designs that act with risk to change the way we act in our contemporary environment, understanding the work of the architect as part of a complex correlation of ambitions, interest and needs, defining new formats of action that renegotiate the relationship between living with the mediums that surround us.

Hashim sarkis as curator of the next Venice biennale in Architecture, calls on architects to think about spaces where they can live in company despite political divisions, the growing economic inequality and individualism; titled "How will we live together? Is no coincidence that architecture discourse finds itself at the crossroad of rethinking the role of design and the current challenges of our societies. We need to understand how to relate to each other, our environment and also be able to comprehend how to manage, act and strategize a more critical relationship with the sociopolitical circumstances that constantly are enacting our environment. We have lost the criticism putting technology and form before the social, social engineering before the value of architecture or environmental qualities at the forefront tagging projects with certifications. We need instead to renew an assessment and roadmap for interrelated civic, social, economic and environmental qualities, where architectural design could form a more integral part.

The right thing is not enough anymore. We need to question if we continue acting in the same way, we need to generate a point of inflection, we need to introduce a change of thought, agenda and practice, to create greater awareness and demonstrate to society the transforming power of architecture to our environment.

# • How warehouse, hangar, shed clearly delineated as private one can transform and feel as publically accessible.

- How the uses surrounding a shed/shelter contribute to creating engaging places for users.
- How shed/shelter can be made more meaningful through the amenities and features they host.
- How the shed/shelter could maximize the potential for a positive social environment.
- How a shed/shelter for people, flora and fauna can interplay and safeguarded.
- How a shed/shelter could be made to feel comfortable through their ability to foster safe and relaxing use.
- How robust shed/shelter can be created as a consequence of their ability to adapt to changing demands across time whilst remaining distinctive.

#### *Issues at stake and context of intervention:*

At different moments in history of political disorder and social upheaval, like the construction of the Berlin Wall, the anti-nuclear movement, the protests against war, social inequality, migration and sustainable environmental goals occupy a prominent place in our recent history, key moments in history that make us reflect on prominent issues we are encountering as a society, pushing us to consider the values of what we want as collective of our environment, although very rarely we inquire on the value and the modes that architecture has been developed under such conditions, even lees what principals could fallow or pursue as protagonist of the built environment, very often is more a respond to standards and isolated concerns with limited notion of the value for generating formats of inhabitation . We will try to see within architectural terms how to debated and instill in the design of very specific architectural elements progressive thoughts that could questioned the status quo, we will revalue existing conventions and practices in various spheres of inhabitation while correlating to architectural proves.

In the context of California many cities are at a threshold of growing towards societies of isolation impacted by income disparity through specialized hubs of industry, planning regulations discouraging density to monoculture communities and segregation at the outset of land speculation. These issues have created a social filtering effect by the increasing cost of living and housing in a state that has accentuated isolated comminutes and the displacement of social groups. In San Diego land speculation combined with tourism has become the industrial base for economic growth, since growth control policies in 1972 state habitat protection plan in 1992 to more recent city greenbelt policies of urban containment and expanding services as Airbnb has elevated land speculation to a fine art. Addressing this years topic on housing we will work on more on overall understanding of inhabitation, trying to find another architectural

perspective to housing in were we see dwelling more as a strategy for land dynamics, social platform of negotiation, economic opportunities and environmental paradigms.

Overarching objectives to address:

- 1. What are the strategies of spatial organizations and architectural elements that provide pathways to overregulated planning?
- 2. How can we evaluate constrains to societies to find alternatives for diversity?
- 3. Which environmental values need to be considered in regards to social inclusion?
- 4. What processes reconcile the applicability and opportunities of practice in developing projects of civic engagement?

#### Architectural mediums of operation:

Revisiting the concept of the shed as universal space conceived within Mies approach and the endless expanding big box by Archizoom will be the inspiration for the studio, coalescing these two similar but opposing views of modernization, the shed as technical and highly calibrated condition of building and the shed as interconnected to the city absorbing through the interior the programmatic interplay of society, but also to provoke a comparison and critique.

What once was a utopia has become our reality to the pressures of the economy and fast proliferation of warehouses, distribution centers, convention centers, storage facilitates and manufacturing plants, usually not seen kindly as examples of good standards for city integration aggravating cohabitation of industrial and residential zones. We will try to override these commonly attributed failures with possible opportunities, the shed could be our source to explore an activated architecture to innovate spaces and spatial relationships, both interior and urban, formal strategies comprised of nested and movable chambers of programs, dynamic devices of essential inhabitation and the layering of structure and enclosure.

We will see this approach in similar tendencies to Tschumi le Fresnoy project where the universal roof is seen as an ultra-technology element housing all mechanical components to existing buildings below, while also being critical of the emphasis it has gained to what Koolhaas has termed junk space. Perhaps in some similarity to Cedric Price Fun House what we are looking for is to subvert the structure and systems as a fragile frame of a possible survival, where the positive take away from the shed resides in the recognition that has evolved to include a broad range of programs. but key factor is to revise now the shed (structure and envelope) are slower to change with the biggest lifespan of a building, usually ranging 50 years or more, while the interior and services change within 5 to 15 years, could then, this notion of the shed help strategize better adaptations to emergent needs that or society requires, maybe could be an alternative to temporary housing, immediate shelter for underserving social groups, cultural venues for underserved areas or when the greatest expense over the life of a building will be the interior formulate better efficiencies in the integration of systems to overlapping provisional programs in the life span of a building

We will develop the semester through the combination of three simple architectural elements: Shed, chambers and devices.

The shed: answers a primordial need architecture is called upon: give a shelter, starting with a neutral mute volume that will gain specificity to the relations of environment, negotiating aesthetic reasoning while evolves its functional aims.

The chamber: deals with the purpose defining programmatic needs and provide resources, through unique or multiplied in a series of floors, the chamber will respond more to a particular range of inhabiting while providing electricity, water, sewage system, climate control and all the services organized and disposed.

The devices: deal with tools useful for performing an action. Conceived as a human scale element placed in the chamber becoming a generator of micro environments and characterized by a define range of activities that can be used for.

#### Comprehensive design goals

Studio 4A is the Comprehensive Design Studio, in which students will develop a complex architectural project to a design development level that culminates in a highly-detailed documentation of their design. Each project is expected to incorporate the essential aspects of design – site, circulation, structural and environmental systems—with more

detailed and integrated design decisions in terms of building envelope, building material and building service systems. The framework of the studio is rigorous in its effort to guide the student to this advanced level of development and the pace of the studio rapidly progresses from conceptualization to design development. Students' projects are expected to incorporate a technical level of detail and understanding, from codes and regulations, including ADA and life safety, to conventions of architectural documentation, including detailed drawings and specifications. The studio will make use of multiple methodologies of design in the visualization and development of the projects, incorporating projective and axonometric drawings, physical and digital modeling, and graphic representations.

Studio 4A is developed in tandem with the **ARCH 464 Systems Integration** course and together they integrate the tools and knowledge necessary to develop a fully integrative Comprehensive Design project. Through a series of lectures, in-class critiques and consultant round tables the studio and seminar will introduce the students to a spectrum of design and engineering professionals, giving students the opportunity to have direct feedback on their design projects.

# Schedule and Deliverables

Schedule and deliverables subject to change. September 17 Tuesday - Concept Design presentation (Assignment 1) October 11 - Midterm presentation: Building Design (Assignment 2) November 12 - Design documentation presentation (Assignment 3) TBD- Final presentation (incorporates Ass. 1-3 and Final Presentation req.)

# **Final Grade Calculation**

- 25% Concept Design
- 20% Midterm Presentation
- 25% Design Documentation
- 20% Final Presentation
- 10% Overall development, Attendance and Participation in studio

# Assignments and Assessment

The Assignments progress quickly from conceptualizing to building design and detailed development of the project to produce a highly resolved and comprehensive project. Each Assignment and sub part builds on the last and adds a level of complexity and further re-evaluation to produce a thoughtful integrated solution.

Assignment 1: Concept Design / reconsidering the Shed: Inquiries, strategies and speculation

- Students will conceptually develop the site and program given through critical analysis of precedents, analysis of the site, passive design in response to the site conditions, and thoughtful development of the program into massing strategies.
  - This assignment consists of 3 key parts
  - Part 1: Precedent Research Analysis (plan, section and 3d)
  - Part 2: Site model and Site diagrams
  - Part 3: Program and Massing diagrams and models
- Learning outcomes 1 and 2 and NAAB criteria A.6 (Use of Precedents), in addition to C.2 (Integrative Evaluation and Decision-Making Design Processes) and C.3 (Integrative Design)
- Assessment/grading criteria used to generate grading rubrics.
   Criteria below will be used in a matrix that is aligned with each sub assignment
- 1) Analysis and Critical Use of Precedent (LO 1 and NAAB A.6))
- 2) Develops clear Conceptual strategies in response to site and precedent, develops clear passive design strategies of massing, orientation and passive heating and cooling (LO 2)
- 3) Clear integrative approach and design decision making (NAAB C.2)
- 4) Integrative design approach- integration of multiple strategies in the creation of a holistic design (NAAB C.3)

Assignment 2: Building and Envelope Design / Calibrating the Shed: correlations, assessment and performance

• Students will develop their project into a building taking into consideration the primary physical and spatial systems of architecture- circulation, structure, envelope and active systems. The physical integration of these primary systems with the Concept Design and their compatibility with the site and passive design strategies is the key objective. This assignment consists of 3 key parts

Part 1: Building Circulation diagrams and models

- Part 2: Building Structural model
- Part 3: Envelope Poche model describing spatial and systems strategies
- Learning outcomes 3 and NAAB criteria C.2 (Integrative Evaluation and Decision-Making Design Processes) and C.3 (Integrative Design)
- Assessment/grading criteria used to generate grading rubrics. Criteria below will be used in a matrix that is aligned with each sub assignment
- 1) Develops the project through representation of a clear building design that successfully integrates the primary physical systems with the conceptual design (LO 3)
- 2) Conceptual Building Envelope responds appropriately to site and design criteria, and passive design goals (LO 3)
- 3) Clear integrative approach and design decision making (NAAB C.2)
- 4) Integrative design approach- integration of multiple strategies in the creation of a holistic design (NAAB C.3)

Assignment 3: Design Documentation / constructing the argument of the shed : projections and assemblies This assignment is focused on the completion of the primary design documentation for the project as a series of primarily black and white architectural drawings that clearly articulate the project, color could be incorporated in very specific aspects that enhance project description.

Part 1: Design Documentation Site Plan, Floor Plans, Elevations and Sections

Part 2: Material Strategies and detail, Detailed wall sections, Material studies

- Learning outcomes 3 and 4 and NAAB criteria B.3 (Codes and Regulations) and B.4 (Technical Documentation)
- Assessment/grading criteria used to generate grading rubrics.
   Criteria below will be used in a matrix that is aligned with each sub assignment
- 1) Develops the project through clear drawings that describe a developed building design successfully integrating all the systems into an architectural project (LO 3)
- 2) Project successfully demonstrates ability to apply local codes and regulations in the building design and the development of plans, sections and elevations and selection of the appropriate building systems (LO 4 and NAAB B.3)
- 3) Detailed technical documentation of the project through technical drawings (NAAB B.4)

# Assignment 4: Final Presentation

• The final presentation compiles and presents the work of the semester alongside a culminating large-scale model. A final model of the proposed project demonstrates the comprehensive qualities of the project and is intended to articulate the interrelationships between the site and building and the integration of primary and detailed building systems.

The final assignment consists of the following parts

- Final Presentation: Assignment 1-3 combined and large-scale sectional model of project
- The final presentation will be a comprehensive evaluation of the work of the entire semester and will be graded on the basis of all 5 Learning Outcomes for this course and NAAB Criteria A.6, B.3, B.4, C.2, and C.3
- Assessment/grading criteria used to generate grading rubrics.
   Criteria below will be used in a matrix that is aligned with each sub assignment
- 1) Analysis and Critical Use of Precedent (LO 1 and NAAB A.6))
- 2) Develops clear Conceptual strategies in response to site and precedent, develops clear passive design strategies of massing, orientation and passive heating and cooling (LO 2)
- 3) Develops the project through representation of a clear building design that successfully integrates the primary physical systems with the conceptual design (LO 3)
- 4) Conceptual Building Envelope responds appropriately to site and design criteria, and passive design goals (LO 3)

- 5) Develops the project through clear drawings that describe a developed building design successfully integrating all the systems into an architectural project (LO 3)
- 6) Project successfully demonstrates ability to apply local codes and regulations in the building design and the development of plans, sections and elevations and selection of the appropriate building systems (LO 4 and NAAB B.3)
- 7) Detailed technical documentation of the project through technical drawings (NAAB B.4)
- 8) Clear integrative approach and design decision making (NAAB C.2)
- Integrative design approach- integration of multiple strategies in the creation of a holistic design (LO5 and NAAB C.3)

#### **Estimate of Costs**

Students should expect to expend the necessary resources to produce drafts and final for each sub- part of the Assignment. Printing costs are dependent on current printing and plotting costs established by the university (please see labs) and specific design solutions and material requirements for modeling materials. Estimated printing and model making costs detailed below. Printing budget- \$500 Model making costs- \$500

There is a tentative 2 day filed trip to Los Angeles in order to visit a selection of buildings, and prominent architectural firms that have proposed compelling projects align to the studio objective

#### **INSTRUCTIONAL PROCESS**

#### **Design Investigations**

Design investigation provides a vehicle for the development and synthesis of beginning principles and processes of design.

#### Critical Discourse/Reviews

Studio discussions and reviews are directed toward the establishment of a critical discourse of issues and investigations. Be prepared to participate in discus

Directed Research and Readings Directed research and readings supplement the ideas and issues evoked in your work. You must complete the in a timely manner and be prepared to discuss their implications orally and through writing.

# Presentations

For each project, you will meet given requirements (two- and three-dimensional exercises) and orally present your work to the instructors, your peers, and invited guests.

Observations/Field Trips Observations and field trips will enrich your awareness and provide you with a foundation upon which to build an understanding of design.

#### Lectures

You are required to attend as minimum Woodbury series lectures. Seek out weekly architecture and urban design events. You are required to document your presence through legible notes and sketches.

# FINAL GRADE CALCULATION

Assessment of student performance:

"A" = Clearly stands out as excellent performance, has unusually sharp insight into material and initiates thoughtful questions, sees many sides of an issue, articulates well, and writes logically and clearly; integrates ideas previously learned from this and other disciplines and anticipates the next steps in progression of ideas. Example: "A" work should be of such a nature that it could be put on reserve for all students to review and emulate. The "A" student is, in fact, an example for others to follow.

"B" = Grasps subject matter at a level considered to be good to very good, is an active listener and participant in class discussion, speaks and writes well, accomplishes more than the minimum requirements, and produces work in and out of class that is of high quality. Example: "B" work indicates a high quality of performance and is given in recognition for solid work; a "B" should be considered a high grade.

"C" = Demonstrates a satisfactory comprehension of the subject matter, accomplishes only the minimum requirements, displays little initiative, communicates orally and in writing at an acceptable level for a college student, and has a generally acceptable understanding of all basic concepts. Example: "C" work represents average work for the students in a program or class. A student receiving a "C" has met the requirements and deadlines of the course. The "C" student must be a student whose work the University would be willing to exhibit. "D" = Quality and quantity of work in and out of class is below average, unsatisfactory and barely acceptable. Example: "D" work is passing by a slim margin.

"F" = Quality and quantity of work in and out of class is unacceptable. Example: "F" work does not qualify the student to progress to a more advanced level of work.

NOTE: Good grades are usually correlated with regular attendance and with assignments of all types completed and on time. Poor grades are often correlated with frequent absences and incomplete and/or missing assignments. Plus or minus grades indicate that a student is at a high or low end of the assigned grade.

#### Project Assessment:

1) Analysis / Research 20% Study / documentation of conditions, elements, influences and phenomena Study / documentation of precedents, case studies, typologies, ways of working, processes, Philosophies, technologies, influential people, relationships and metaphors

#### 2) Idea / Belief 20%

Realization: critical development of design intent,rationale or position based upon research & analysis writing / re-writing

3) Rigor / Completion 20% Day-to-day progress, perseverance

NAAB student performance criteria

- communication Skills: Ability to read, write, speak and listen effectively.
- Design Thinking Skills: Ability to raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, reach well-reasoned conclusions, and test alternative outcomes against relevant criteria and standards.
- Visual Communication Skills: Ability to

Timely Completion of project presentations Attendance in class and workshops

4) Clarity / Resolve 20%

End products that successfully demonstrate design

intent, rationale or position Development of systems, order, hierarchy and Relationships

# 5) Skill / Craft 20%

Professional development and composition of drawings, models, digital media and other means of representation

use appropriate representational media, such as traditional graphic and digital technology skills, to convey essential formal elements at each stage of the programming and design process.

 Investigative Skills: Ability to gather, assess, record, apply, and comparatively evaluate relevant information within architectural coursework and design processes.

- Use of Precedents: Ability to examine and comprehend the fundamental principles present in relevant precedents and to make choices regarding the incorporation of such principles into architecture and urban design projects.
- Applied Research: Understanding the role of applied research in determining function, form, and systems and their impact on human conditions and behavior.
- Pre-Design: Ability to prepare a comprehensive program for an architectural project, such as preparing an assessment of client and user needs, an inventory of space and equipment requirements, an analysis of site conditions (including existing buildings), a review of the relevant laws and standards and assessment of their implications for the project, and a definition of site selection and design assessment criteria.
- Accessibility: Ability to design sites, facilities, and systems to provide independent and integrated use by

The levels of accomplishment are defined as:

Understanding: The capacity to classify, compare, summarize, explain and/or interpret information.

Ability: Proficiency in using specific information to accomplish a task, correctly selecting the appropriate information, and accurately applying it to the solution of a specific problem, while also distinguishing the effects of its implementation.

The following SPC's are to be specifically demonstrated through documented assignments, evaluations, and/or projects.

A.1 Communication Skills Ability to read, write, speak, and listen effectively.

A.2 Design Thinking Skills Ability to raise clear and precise question, use abstract ideas to interpret information, consider diverse points of view, reach well reasoned conclusions, and test alternative outcomes against relevant criteria and standards. individuals with physical (including mobility), sensory, and cognitive disabilities.

- Life Safety: Ability to apply the basic principles of life-safety systems with an emphasis on egress.
- Environmental Systems: Understanding the principles of environmental systems' design such as embodied energy, active and passive heating and cooling, indoor air quality, solar orientation, daylighting and artificial illumination, and acoustics; including the use of appropriate performance assessment tools.
- Structural Systems: Understanding of the basic principles of structural behavior in withstanding gravity and lateral forces and the evolution, range, and appropriate application of contemporary structural systems.
- Collaboration: Ability to work in collaboration with others and in multidisciplinary teams to successfully complete design projects

A.3 Visual Communication Skills Ability to use appropriate representational media, such as traditional graphic and digital technology skills, to convey essential formal elements at each stage of the programming and design process.

A.5 Investigative Skills Ability to gather, assess, record, apply, and comparatively evaluate relevant information within architectural coursework and design processes.

A.7 Use of Precedents Ability to examine and comprehend the fundamental principles present in relevant precedents and to make choices regarding the incorporation of such principles into architecture and urban design projects.

A.11 Applied Research Understanding of the role of applied research in determining function, form, and systems and their impact on human conditions and behavior.

# **B.1 Pre-Design**

Ability to prepare a comprehensive program for an architectural project, such as preparing an assessment of client and user needs, an inventory of space and equipment requirements, an analysis of site conditions (including existing buildings), a review of the relevant laws and standards and assessment of their implications for the project, and a definition of site selection and design assessment criteria.

#### **B.2** Accessibility

Ability to design sites, facilities, and systems to provide independent and integrated use by individuals with physical (including mobility), sensory, and cognitive disabilities.

B.5 Life Safety Ability to apply the basic principles of life-safety systems with an emphasis on egress.

**B.8 Environmental Systems** 

SoA - Tracks of Mastery

- 1 Critical Thinking practiced: High Importance 2 Design practiced: High Importance
- 3 Building! practiced: High Importance

Understanding the principles of environmental systems' design such as embodied energy, active and passive heating and cooling, indoor air quality, solar orientation, daylighting and artificial illumination, and acoustics; including the use of appropriate performance assessment tools.

#### **B.9 Structural Systems**

Understanding of the basic principles of structural behavior in withstanding gravity and lateral forces and the evolution, range, and appropriate application of contemporary structural systems.

#### C.1 Collaboration

Ability to work in collaboration with others and in multidisciplinary teams to successfully complete design projects.

4 Representation practiced: High Importance 5 Professionalism practiced: High Importance

#### ATTENDANCE POLICY

**Tardiness:** Class will begin promptly at 1:00PM. Failure to arrive on time will result in a "0" for participation for that day. Failure to arrive after 1 hour will result in an unexcused absence.

**Absence:** Students cannot be absent more than 2 times in the semester. 3 or more unjustified absences can result in a grade of "F" for the course. Students MUST notify their instructor of a planned absence at least one day before the absence. This rule will be strictly enforced.

**Food in studio:** Students may not eat in studio during class time. Lunch must be taken before 1:00 pm. The smell of food and its presence during class is rude, annoying and un-professional.

**Music or movies in studio:** The playing of music without the use of headphones is forbidden. Watching movies during studio, unless they pertain to the studio itself, or have been authorized by the instructor is not allowed under any circumstances.

**Cleanliness:** The studios must routinely be cleaned and kept in a usable condition. It is every student's responsibility to observe good manners and keep a professional creative environment that is conducive to productive work. Show that you care about your own immediate environment. Food, wrappings, paper and cardboard waste should all be thrown out on a regular basis.

**Studio spaces:** must be maintained in the same shape as they were at the start of semester. No build-outs are allowed. Woodbury University is strictly held to Fire Department standards for life-safety and fire hazard prevention. Your indiscipline and carelessness with regards to encroachment into walkways and excessive heights of partitions could lead to the closure of studios altogether. Be professionals and maintain a safe, legal and usable studio environment.

**Presentations and Pinups:** Failure to have your required work pinned up at the time appointed by your instructor will result in your project being removed from the presentation schedule. Your work will be reviewed by your instructor during the following class and will be penalized one letter grade.

Important: Computer/hardware/plotting problems are not an excuse! You must print your material far enough in advance of the presentation in order to account for complications.

**Maintaining a presence in studio:** <u>All students are required to work in studio both in and out of class</u>. Work in process shall be displayed with the highest degree of professionalism, and work from other classes shall not be on display, unless pre-approved by the instructor.

# SCHEDULE

Assignment 1 /		Concept Design Reconsidering the Shed: Inquiries, strategies and speculation
W 1	T 20 Aug	Assignment #1 Lecture 1: Shed / Principals of the built environment
	F 23 Aug	in class work
W2	T 27 Aug	Assignment #1.1 DUE Lecture 2: The polemics Land in-class - Notation Workshop
	F 30 Aug	in class work
W3	T 03 Sep	Assignment#1.2 DUE Lecture 3: Tactics publicness and cohabitation in-class - workshop
	F 06 Sep	Assignment#1.2 DUE
W4	T 10 Sep F 13 Sep	Assignment#1.2 DUE Lecture 4: Codes / Guest lecturer
Assignment 2 /		Building and Envelope Design Calibrating the Shed: correlations, assessment and performance
W5	T 17 Sep	Concept Design presentation (Assignment #1 DUE) Assignment#2
	F 20 Sep	Lecture 5: Structure, Skin Lecture: Nicolas Leong
W6	T 24 Sep	Assignment#2.1 DUE Lecture 6: Environmental strategies and sytems
	F 27 Sep	in-class – workshop Lecture: Round Table Social housing
W7	T 01 Oct	Assignment #2.2 DUE
	F 04 Oct	Marcel out / Blass
Assignment 3:		Design Documentation Constructing the argument of the shed: projections and assemblies
W8	M 08 Oct F 11 Oct	NO CLASS Midterm presentation: Building Design (Assignment 2) Assignment #3 Lecture 7: Detailing and documentation Lecture: CONFab

W9	T 15 Oct F 18 Oct	Assignment #3.1 DUE in-class – workshop
W10	T 22 Oct 24 Oct F 25 Oct	Assignment #3.2 DUE Academy of Architecture for Justice Charrette Academy of Architecture for Justice Charrette
W11	T 29 Oct F 31 Oct	Assignment #3.3 DUE in-class – workshop
W12	T 05 Nov F 08 Nov	Assignment #3.4 DUE in-class – workshop
W13	T 12 Nov F 15 Nov	Design documentation presentation (Assignment 3) in-class – workshop
W14	T 19 Nov F 22 Nov	
W15	T 26 Nov F 29 Nov	Pre final / Presentation rehearsal Lecture: Amy Franceschini NO CLASS
W16	T 03 DIC F 06 DIC	ASSIGNMENT #4 DUE (tentative date) ASSIGNMENT #4 JURY (tentative date)

Textbooks and readings:

- Heino Engel, Structure Systems Hatje Cantz; 3 edition (February 1, 2007) Saja Kosanović, Tillmann Klein, Thaleia Konstantinou, Ana Radivojević and Linda Hildebrand [eds.]. Sustainable and resilient building design approaches, methods and tools, TU Delft Open, 2018
- McMorrough, Julia. Materials, Structures, and Standards, Boston: Rockport, 2006. Ilka & Andreas Ruby, Re-inventing Construction, 2010 Ruby Press, Berlin Ilka & Andreas Ruby, Urban Transformation, 2008 Ruby Press, Berlin
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- Allen, Edward. Fundamentals of Building Construction: Materials and Methods, Fifth Edition (Hoboken: Wiley,2009)
- DETAIL 4/1990; 5/1991; 4/1996; 7/1998; 7/2001; 7+8/2003; 11/2005; 10/2008
- Nicholas Olsberg, Some thjoghts on Sheds, Drawing matter 2016 Farshid Moussavi, Daniel Lopez, Ahmadreza Schricker and Garrick Ambrose, The Function of Form (Actar:2009)
- Farshid Moussavi and Michael Kubo, The Function of Ornament
- Balmond C., Informal Prestel, Münich 2007

Recommended Textbooks:

Structure:

- Onouye, Barry with Kevin Kane. Statics and Strength of Materials for Architecture and • Building Construction. Upper Saddle Hill, NJ: Prentice Hall. 4th Edition. 2011
- Allen, Edward & Joseph Iano. The Architect's Studio Companion. New York: John Wiley and • Sons, Latest Edition

- Wahl, Iver. Building Anatomy: An Illustrated Guide to How Structures Work. New York, NY: McGraw Hill Companies, 2007.
- Underwood, Rod & Michele Chiuini. Structural Design, A Practical Guide for Architects. New York: John Wiley and Sons, 1998.
- Ronald Shaeffer, Elementary Structures for Architects and Builders. Upper Saddle Hill, NJ: Prentice Hall, 4th Edition, 2002.
- Schodek, Daniel, Structures, 3rd Edition. Upper Saddle Hill, NJ: Prentice Hall, 1998.
- Ambrose James , Building Structures. Upper Saddle Hill, NJ: Prentice Hall,
- Berger H., Light Structures. Structures of Light, Birkhäuser, Basel 1995
- LeCuyer A., Steel and Beyond, Birkhäuser, Basel 2003
- Hensel M., Menges A., Michael Weinstock: Emergence Morphogenetic Strategies, Wiley -Academy, Chichester 2004
- Fischer J., Beton, Béton, Concrete, h.f.ullmann Verlag, Potsdam 2008
- Motro R., Tensegrity. Structural Systems for the Future, Kogan Page Ltd. London 2003
- Otto F., Das Gesamtwerk. Leicht Bauen Natürlich Gestalten, Birkhäuser, Basel 2005
- Pottmann H., Asperl A., Hofer M., Kilian A., Architectural Geometry, Bentley Institute Press, 2007
- Bechthold, M., (2007). Innovative surface structures: technologies and applications, London: Taylor & Francis.
- Gordon, J., (2003). Structures, or, why things don't fall down 2nd ed., New York: Da Capo Press.
- Hensel M., Menges A. Weinstock M. eds, (2006). "Techniques and Technologies in Morphogenetic Design," AD Architectural Design, vol. 76/2.
- Ruby, I., 2010. Re-inventing construction, Berlin: Ruby Pres

# Materials:

- Ashby, M., 2010. Materials and design: the art and science of material selection in product design 2nd ed., Amsterdam; Boston; London: Butterworth-
- Heinemann.
- Ball, P., 1997. Made to measure: new materials for the 21st century, Princeton:
- Princeton University Press.
- Beylerian, G., 2005. Material ConneXion: the global resource of new and
- innovative materials for architects, artist and designers, Londres: Ed. Thames &
- Hudson.
- Brownell, B., (2006,2008, 2010). Transmaterial 1,2,3: a catalog of materials that redefine our physical environment, New York: Princeton Architectural Press.
- Hensel, M., Menges, A., Architectural Association (Great Britain), 2006. Morpho-ecologies, London: Architectural Association.
- Kula, D. & MatériO (Firm), 2009. Materiology: the creative's guide to materials
- and technologies, Amsterdam; Basel; Boston: Frame Publishers; Birkhäuser.
- Lefteri, Ch., (2007). Materials for Inspirational Design, Laurence King.
- Lynn, G., (2010). Composites, surfaces, and software: high performance architecture 1st ed., New Haven Conn.; New York: Yale School of Architecture; Distributed by W.W. Norton & Co.

# Fabrication:

- Barkow, F. & Barkow Leibinger Architekten. Architectural Association (Great Britain), 2009. An atlas of fabrication, London: AA Publications.
- Lefteri, C., 2007. Making it: manufacturing techniques for product design, London: Laurence King.

 Thompson, R., 2007. Manufacturing processes for design professionals, New York: Thames & Hudson.

## Glossary:

#### Beam

A structural member, usually horizontal, with a main function to carry loads cross-ways to its longitudinal axis. These loads usually result in bending of the beam member. Examples of beams are simple, continuous, and cantilever.

## Beam-Column

This is a structural member whose main function is to carry loads both parallel and transverse to the longitudinal axis.

#### Cantilever

Cantilever refers to the part of a member that extends freely over a beam, which is not supported at its end.

#### Collateral Load

Collateral load is additional dead loads (not the weight of people and not the weight of the building itself), such as plumbing, duct work, ceilings, and other components of the structure.

#### Column

A column is a main vertical member that carries axial loads from the main roof beams or girders to the foundation parallel to its longitudinal axis.

#### Continuity

Continuity is the term given to a structural system describing the transfer of loads and stresses from member to member as if there were no connections.

#### Damping

Damping is the rate of decay of amplitude for floor vibrations.

#### Dead Load

Dead load describes the loads from the weight of the permanent components of the structure.

#### Deflection

Deflection is the displacement of a structural member or system under a load.

Dynamic Load This type of load varies over time.

## Footing

A footing is a slab of concrete under a column, wall, or other structural to transfer the loads of the member into the surrounding soil.

# Foundation

A foundation supports a building or structure.

#### G-Type Joist Girder

A type of Joist Girder using joists located at panel points where diagonal webs intersect the top chord of the joist only.

#### Gable

A gable is located above the elevation of the eave line of a double-sloped roof.

#### Gage

Gage can refer to the thickness of a sheet of material or the distance between centerlines in a set of holes, usually perpendicular to the joist or joist girder.

#### Girder

A girder is the main horizontal member spanning between two main supports and carries other members or vertical loads within the structure.

Grade The ground elevation of the soil.

#### Header

A member that carries other supporting members and is placed between other beams.

# Hip Roof

A roof sloping from all four sides of a building.

# Joist

A structural load-carrying member with an open web system which supports floors and roofs utilizing hot-rolled or cold-formed steel and is designed as a simple span member.

Kip 1000 pounds.

# Live Load

Non-permanent loads on a structure created by the use of the structure.

#### Load

An outside force that affects the structure or its members.

## Modulus of Elasticity (E)

The value is usually 29,000 ksi for structural steels and is also called Young's Modulus. It calculates the slope of the straight-line portion of the stress-strain curve in the elastic range.

## Moment

Moment is the tendency of a force to cause a rotation about a point or axis which in turn produces bending stresses.

#### Moment of Inertia (I)

A measure of the resistance to rotation offered by a member's geometry and size.

#### Pitch

Pitch is the slope of a member defined as the ratio of the total rise to the total width

# Reaction

Reaction is the force or moment developed at the points of a support.

#### Seismic Load

Loads produced during the seismic movements of an earthquake.

# Shear

Forces resulting in two touching parts of a material to slide in opposite directions parallel to their plane of contact.

# Span

The distance between supports.

# Structural Steels

Steels suitable for load-carrying members in a structure.

# Strut

A structural brace that resists axial forces.

# Stud

A vertical wall member used to attach other structures, such as walls.

# **Torsion Loads**

A load that causes a member to twist about its longitudinal axis. A couple or moment in a plane perpendicular to the axis produces simple torsion.

## Material organization:

As designers of space we need to propose modes of organization, it relates to the geometrical composition that has a flow of direction, a path to which we can rely to follow, material relates to the elements (also considering as material program, light, mass, void) that compose and inhabit the direction of space.

## Peformative design:

In the act of shaping form, is the incorporation of the elements that influence the sate if its design. In architecture we see it not as form finding but the deliberate act of designing form to factors that generate it.

# Mobility:

Social transformations and those of daily life are unforeseeable in the lifespan of a building. Buildings and new cities should be able to easily adapt to the will of a future society that will occupy them, they must allow for transformation to occur without resorting to demolition

#### Infrastructure:

Infrastructure is the technical elements of a city, necessary for daily life, not specifically used by its inhabitants: for instance the networks of provisions, sanitation, circulation... the inhabitants use only those tools that are connected to these networks, in other words, toilets, electrical tools, cars, and even those insulating devices such as pavement, walls and floors...The principle of mobility takes into account the rigidity of infrastructure (neutral elements) and the mobility of those tools connected to that infrastructure.

# Spatial infrastructure:

Spatial infrastructure is a three-dimensional grill, elevated on columns, placed above the level of the ground. The light-weight uses (housing, offices, and community rooms) inscribe themselves in the holes of this structure and in the elevated parts. The heavy-weight uses (circulation, gathering halls, and industry) would occupy the surface of the ground under the three-dimensional grill, and between the supporting columns. Those columns would house circulation, and provisions, which move vertically (lifts, stairs, and vertical ducts)

#### Mixed-use Development:

Being a fundamental component of an urban fabric, a project has the ability to link and integrate multiple other used: workspaces and leisure and service facilities.

#### Multiple Users:

The city comprises a heterogeneous mixture of inhabitants, with increasingly diverse life styles and family models that need to be accommodated in a residential project.

## Building-landscape:

The compatibility between urban and suburban conditions is also translated into the possibility of connecting indoor and outdoor space, the built and the unbuilt, and of understanding the project itself as the construction of a landscape.

## Community Space:

communal spaces where exchange and socializing can take place.

# Websites:

Material: http://www.transstudio.com/ http://www.materialexplorer.com http://www.materialexplorer.com http://www.materialexplorer.com http://www.materialexplorer.com http://www.materialexplorer.com http://www.ics.uci.edu/~eppstein/junkyard/all.htm I - http://www.ics.uci.edu/~eppstein/junkyard/all.htm I - http://www.ics.uci.edu/~eppstein/junkyard/all.htm I - http://www.structuresonline.net/wpcontent/uploads/2015/08/STEEL-DETAILING-GUIDE-Sample-Version.pdf https://www.aisc.org/publications/steelconstruction-manual-resources/#28293 http://static.tti.tamu.edu/conferences/tsc11/prese ntations/struct-hydraulics-1/farris.pdf

# Lectures /Documentarie/Movies:

Lectures: Christian Kerez https://www.youtube.com/watch?v=u94hBA-GoBY https://www.youtube.com/watch?v=srONiu7ExH o

### Density:

the necessary optimization of land use and the multiple relations and activities they can accommodate.

#### Compactness:

The geometry and arrangement of spaces can contribute to optimize the relation between the different programs accommodated by a project.

#### Economy of Resources:

Aside from density and compactness, the choice of construction and environment comfort systems contributes to reducing material consumption and energy use.

#### Flexibility:

Adaptability:

Built space can facilitate and accommodate a great number of requirements and activities, both predictable and unpredictable, for known and unknown users.

# Openness:

Space is endowed with flexibility through the removal of traditional associations between functions in favor of the indetermination of fluid space..

Magazines/Periodicals: http://www.structuremag.org http://www.detail-online.com http://www.detail.de http://www.concreteconstruction.net http://www.jlconline.com http://web.mit.edu/structuraldesign/ https://structurae.net http://www.formfinder.at/main/structures/ https://www.journals.elsevier.com/compositestructures

kengo Kuma https://www.youtube.com/watch?v=LynYUwYZX qk

Cecil Balmond https://vimeo.com/147929159 Hanif Kara and Daniel Lopez on Fuller: https://www.youtube.com/watch?v=re5JhF85Ny 8

Hanif Kara: https://www.youtube.com/watch?v=1wQervoxbm o

Benedetta Tagliabue: https://www.youtube.com/watch?v=iBv51FVT7M0

Mark West; The Secret Life of Structures https://www.youtube.com/watch?v=z2BOXLyW5 II

Renzo piano: https://www.youtube.com/watch?v=17CbljFi7k0

Achim Menges: https://www.youtube.com/watch?v=PbgArau_4vI

Anton Garcia Abril / Ensamble: https://www.youtube.com/watch?v=1_nKMd1fO7 w

Michael Meredith / Mos: frei otto :spanning the future

https://www.youtube.com/watch?v=62r3UPrOS9 k

Norman Foster Interview: Striving for Simplicity https://www.youtube.com/watch?v=lufVOqRWpL Q

#### DEPARTMENT POLICIES AND PROCEDURES

Requirements for Documentation and Archiving Each student must submit documentation of the full semester's work at the end of each term, in pdf format. Materials should include research, writing, and design work, including important study models and sketches. Studio faculty will further define how this work should be organized and presented before the end of the semester. Failure to submit the required documentation in usable format may result in a grade reduction in the final grade of the semester. Documentation of the studio work is essential for the NAAB accreditation process and assessment of the architecture program.

The university reserves the right to retain student work for archival purposes. Projects/models, assignments, and exams will be kept at the department's discretion for this purpose. Students will be asked to help with archiving their projects at the end of the semester. https://www.youtube.com/watch?v=cMmaMwm3pk

Tom Wiscombe: https://www.youtube.com/watch?v=PbhGEcG4V _M

Jesse Reiser https://www.youtube.com/watch?v=sPYixMjyYzI

Thomas Leslie on Nervi: https://www.youtube.com/watch?v=d04mCdGyb 04I

Movies/documentaries:

Archiculture: a documentary film that explores the architectural studio <u>https://www.youtube.com/watch?v=hJNxgv9Rak</u> 0

#### Writing Requirements

All written work must meet the standards for English. Poorly written papers may be returned without a grade for revision and resubmission, and may be subject to grade reduction. Students are encouraged to utilize the Woodbury Writing Center. Link is <u>here</u>.

#### Studio Culture

The studio environment is an essential component in learning to become an architect. One goal of the School of Architecture is to create a vibrant, exploratory, safe and respectful learning culture for students. Only through respect between faculty and students, as well as students among themselves, can a healthy educational studio culture be fostered. Students are required to uphold high standards of behavior and academic discipline while in the studio. See the full Studio Guidelines and Studio Culture Policy for more information.

School Policy on Social Equity and Diversity

Our mission is to provide an environment where people can learn, teach and work with a shared sense of purpose, core values and respect without bias towards individual beliefs, values and areas of difference. We do this in an effort to create a community that respects and values the full and equal inclusion of its members. Our goal is to provide an environment that is welcoming and inclusive of all.

#### Universal Pedagogy

Woodbury University is committed to making reasonable accommodations to assist individuals with disabilities in reaching their academic potential. Students desiring accommodations due to a physical, learning or psychological disability must first complete an Accommodations Request Form, which can be downloaded <u>here</u>, and found under "Academic Resources." Accommodations cannot be granted prior to the instructor's receipt of a Notification of Special Needs Release Form from the Disabilities Coordinator. Accommodations are never provided retroactively. (For more information, contact the Disabilities Coordinator (818) 394-3345.)

#### Academic Honesty

Students are responsible for familiarizing themselves with Woodbury's Student Code of Conduct, which can be found in the Catalog. Academic misconduct, dishonesty, plagiarism, and cheating will not be tolerated and may lead to failure of the course.

#### **Grade Requirements**

Refer to the Woodbury University catalog for grading standards and policies.

#### **Environmental Responsibility**

Studio projects shall be designed in a socially and environmentally responsible manner. All projects should reduce dependencies on non-renewable resources.

#### **Class Attendance**

It is mandatory that students take advantage of all scheduled course time. Regular attendance at EVERY class is expected throughout the duration of the class/studio time. Arrival at the beginning of the class period is required. Lateness or early departure will be considered as an absence. 'Regular and prompt attendance at all university classes is required. The instructor is not obligated to assign extra work or to prepare additional examinations for classes missed. It is understood that when 15% of the class time has been missed, the student's absence rate is excessive. Each

#### **Calculation Of Grade**

Letter grades are converted to numeric values using the following values:

Letter	GPA	%	Definition	
A	4.00-3.84	96-100	Student learning and accomplishment far exceeds published objectives for the course/test/assignment and student work is distinguished	
A-	3.83-3.50	92-95	consistently by is high level of competency and/or innovation.	
B+	3.49-3.17	88-91	Student learning and accomplishment goes beyond what is expected in the published objectives for the course/test/assignment and student work is frequently characterized by its special depth of understanding, development, and/or innovative experimentation.	
В	3.16-2.84	84-87		
В-	2.83-2.50	80-83	Students learning and accomplishment meets all published objectives for the course/test/assignment and the student work demonstrates the expected level of understanding, and application of concepts introduced.	
C+	2.49-2.17	76-79		
С	2.16-1.84	72-75		
C-	1.83-1.50	68-71		

instructor will announce his/her attendance policy in the course syllabus.

#### Excused Absence

Students should report any illness or emergency to their course instructor, preferably before missing the class, by emailing the instructor. Written documentation (doctor's note, etc.) is required for an excused absence, and should be submitted to the instructor at the next class meeting. Extended absence due to medical issues, family issues, etc. should be reported to the Dean of Students' office for appropriate documentation.

Students who anticipate absence due to religious observance or similar commitments should speak with their instructor at the start of the term to review all dates in question and develop a plan to meet all course requirements.

#### Email

Students are advised to meet with their instructors during posted office hours. Face-to-face communication in discussing and resolving problems is preferable to email exchanges. Additionally, meetings must be scheduled in advance using email correspondence. Email correspondence must be written in a respectful and professional manner. It is the student's responsibility to consistently check for email.

#### **Grievance Protocol**

Students should use the following protocol for questions, grievances, or general concerns about coursework and the studio environment. Health and safety concerns and emergencies should immediately be directed to campus security (818-252-5208). Academic concerns should be directed first to the student's instructor, and then to the studio coordinator as appropriate. If further consultation is required, the student is advised to meet with the Coordinator and/or the Chair (Marc Neveu, both Undergraduate and Graduate).

#### **Class Syllabus and Structure**

While every effort will be made to follow the outline of the published syllabus, course structure and calendar may be changed at the instructor or coordinator's discretion. Announcements will be made if such changes occur. Students who miss class are responsible for tracking any such announcements.

D+	1.49-1.17	64-67	Student learning and accomplishment based on the published objectives for the course/test/assignment were met with minimum passing achievement.
D	1.16-0.60	60-63	
F	0.00-0.60	< 60	Student learning and accomplishment based on the published objectives for the course/test/assignment were not sufficiently addressed nor met.

# Woodbury University School of Architecture Graduate Design Studio 4: The Total Building ARCH 589

Semester:Spring 2020Time:Tuesday/Friday 1:15-6:15 PMLocation:TBDInstructor(s):Linda TaalmanOffice Hours:Monday 1-4pm

# **Catalog Description**

Credits 6.00. Students are challenged to synthesize architectural considerations, from the conceptual to the tangible, in the comprehensive design of a building. The studio project grows from a strong theoretical base into a response to the complexities of program and site. Accessibility, environmental performance, and life safety are addressed. Emphasis is placed on the integration of building systems with envelope and structure. Material selection is guided by both climate and context and is sensitive to resource conservation. Prerequisites: Graduate Studio 3

# Learning Outcomes

Upon completion of this course, it is expected that students will be able to:

- Develop a comprehensive design proposal, integrating clear formal and spatial architectural solutions that respond to site and climate, accessibility, and present a fully integrated approach to systems
- Emphasize the design of an architecture through assemblies of materials and systems
- Make connections between building composition, assembly, manufacturing, fabrication and representation
- Design a construct fully articulate of human activity and code compliance, of component parts and whole, and human control and resource management
- Integrate the multitude of systems into the proposed architecture required today to create sustainable building solutions

# NAAB Student Performance Criteria

# A.4 Architectural Design Skills

Ability to effectively use basic formal, organizational and environmental principles and the capacity of each to inform two- and three-dimensional design.

# A.5 Ordering Systems

Ability to apply the fundamentals of both natural and formal ordering systems and the capacity of each to inform two- and three-dimensional design.

## **B.2 Site Design**

Ability to respond to site characteristics including urban context and developmental patterning, historical fabric, soil, topography, climate, building orientation, and watershed in the development of a project design.

#### **B.3 Codes and Regulations**

Ability to design sites, facilities and systems consistent with the principles of lifesafety standards, accessibility standards, and other codes and regulations.

## **B.4 Technical Documentation**

Ability to make technically clear drawings, prepare outline specifications, and construct models illustrating and identifying the assembly of materials, systems, and components appropriate for a building design.

#### **B.6 Environmental Systems**

Understanding the principles of environmental systems' design, how systems can vary by geographic region, and the tools used for performance assessment. This must include active and passive heating and cooling, indoor air quality, solar systems, lighting systems, and acoustics.

#### **B.7 Building Envelope Systems and Assemblies**

Understanding of the basic principles involved in the appropriate selection and application of building envelope systems relative to fundamental performance, aesthetics, moisture transfer, durability, and energy and material resources.

#### **B.8 Building Materials and Assemblies**

Understanding of the basic principles utilized in the appropriate selection of interior and exterior construction materials, finishes, products, components and assemblies based on their inherent performance including environmental impact and reuse.

# **B.9 Building Service Systems**

Understanding of the basic principles and appropriate application and performance of building service systems including mechanical, plumbing, electrical, communication, vertical transportation security, and fire protection systems.

#### **B.10 Financial Considerations**

Understanding of the fundamentals of building costs, which must include project financing methods and feasibility, construction cost estimating, construction scheduling, operational costs, and life-cycle costs.

#### C.2 Integrative Evaluation and Decision-Making Design Process

Ability to demonstrate the skills associated with making integrated decisions across multiple systems and variables in the completion of a design project. This demonstration includes problem identification, setting evaluative criteria, analyzing solutions, and predicting the effectiveness of implementation.

#### C.3 Integrative Design

Ability to make design decisions within a complex architectural project while demonstrating broad integration and consideration of environmental stewardship, technical documentation, accessibility, site conditions, life safety, environmental systems, structural systems, and building envelope systems and assemblies.

## **Course Description**

**HOME NOW**: The 2020 Comprehensive design studio takes on several specific challenges facing us now, the greatest being climate change and the impact that buildings have on their environment and the housing crisis and the ability for architects to provide solutions for the 100% not the 1%. Within this context, the comprehensive studio places particular emphasis on how to design and integrate technology and building systems within our building envelope, with the goal of creating spaces that are highly tuned to their climate, context and social needs. We will question the idea of home and domestic space and redefine how our individual spaces can make a positive impact on our shared communities.

2020 is the year that California implements the first net zero energy code requirement at the residential scale, with the plan that by 2030 all buildings in California will be net zero. What this means is that our living spaces, many of which are planned piece by piece by the individual inhabitant, will lead the way towards a sustainable architecture that integrates energy performance with envelope efficiency at the highest level. Dwelling spaces have always played a critical role in the history of architecture, and particularly in California, with architects pioneering new technologies, materials and systems through the most essential space of the home. We will question both the idea of home and the role technology can play in defining how we live and how we build our spaces.

2020 is also a time of crisis for housing globally, and locally within the context of California which is facing a staggering number of homeless and a total lack of affordable housing at the rural, suburban and urban scale. We need fresh solutions. How can architects be a part of the future solutions for our residential spaces at all scales? We will rethink the idea of the house from the inhabitants needs as a 21st century citizen, what is the purpose of our home today? What is the definition of family, neighborhood, community? How do we want to live in the future?

#### Micro-housing

We will use the micro unit as a catalyst for big change. Starting with a single unit and the scale of the inhabitant the studio will innovate solutions for living, energy usage and generation, and material and resource management. The unit will then be tested at a variety of scales- the rural, the suburban and the urban- and combinations- the single unit, the double and the multi.

#### Material Research and Prefabrication/Construction

Materials and methods of construction will be questioned as we strive to present new environmental responsible and economical solutions for making space. One of the biggest inhibitors to housing is cost, and this studio strives to provide detailed solutions that are mindful of their environmental and economic feasibility. The studio will research methods of prefabrication, off site fabrication, and construction as a part of this questioning.

As part of the studio rubric we will take on the ACSA 2020 Housing Competition HERE & NOW: A House for the 21st Century. And students will be expected to submit their projects to the competition at the end of the semester.

The studio explores the potential for architects to innovate within a highly defined building envelope. Students will develop designs for micro housing within the context of the Los Angeles region. The studio encourages architecture that retains its own identity while integrating and filtering its environment. There will be an integral focus on passive design and the interface between construction systems developed and environmental systems required for the functionality of the program and achieving net zero energy. Through the course of the semester, the students will develop the projects through a rigorous methodology of drawings, diagramming and modelling arriving at a highly detailed comprehensive building.

# Schedule and Deliverables

Part 1: Design and Material Research for a Micro Unit: Historical Precedents, Material Research and Defining the Home Space- due January 28 Part 2: Concept Design for a Prefabricated Micro Unit- due February 11 Part 3: Building Systems Design – due March 7 Part 4: Building Development and Site Integration: Case studies for implementing design and selected systems and materials- due May 1

Assignments and Schedule subject to change or modification throughout the semester. Lectures, guests and field trips will be announced.

# Final Grade Calculation

15%- Part 1: Design and Material Research
15%- Part 2: Concept Design
20%- Part 3: Building Systems Design (Midterm Presentation)
30%- Part 4: Building Development and Site Integration
10%- Final Presentation
10%- Attendance and Participation

# Assignments and Assessment

Students will work through a combination of research & development and design in order to develop highly detailed and inventive building systems with a particular focus on innovative building envelope systems. Students will deploy these systems at a series of scales from small to large. Students will develop detailed drawings and models that they will prototype in digital models, 3d prints and detailed physical models.

Assignments will follow through 4 phases, Research & Development, Concept Design, Systems Design and Building Development and Site Integration. Weekly updates and sub assignments will be given. Students will work primarily as individuals; research may be done in groups.

# Criteria for Evaluation

Each Assignment will be evaluated for two core criteria and specific criteria noted below for each part 1. Clarity in Representation

2. Conceptual Rigor and Development

# Part 1: DESIGN AND MATERIAL RESEARCH due January 28

Activities and Processes: Research of Precedents, Material Research and Defining the Home space through documentation, catalog and interpretation, drawing and digital modeling.

- Students will research the studio topic through a multiprong interpretive lens, critical analysis of precedents, material research, and programmatic research
- This assignment consists of 3 key parts
  - 1.1. Precedent Research
  - 1.2. Material Research
  - 1.3. Programmatic Research
- Assessment/grading criteria used to generate grading rubrics.

Criteria below will be used in a matrix that is aligned with each sub assignment

- Precedent Research, Documentation and Interpretation
- Material Research (NAAB B.8)
- Programmatic Research (NAAB C.2)

# Part 2: CONCEPT DESIGN due February 11

Activities and Processes: Development of Concept Design through physical and digital modeling, drawing both orthographic and axonometric, and 3d visualization.

- Students will conceptually develop their material and program research through the development of the envelope into a unit that integrates concepts for passive design This assignment consists of 2 key parts
  - 2.1. Conceptual development of program as a 3-dimensional space integrating the human scale

2.2. Conceptual envelope design and passive design strategies (daylighting, shading, heat gain, natural ventilation)

Assessment/grading criteria used to generate grading rubrics.

Criteria below will be used in a matrix that is aligned with each sub assignment

- Develops clear Conceptual strategies in response to material and programmatic research (NAAB, A.5)
- Conceptual Building Envelope responds appropriately to design criteria, develops clear passive design strategies for massing and orientation (NAAB B.6, B.7)
- Integrative design approach- integration of multiple strategies in the creation of a holistic design (NAAB C.3)

# Part 3: SYSTEMS DESIGN due March 6

Activities and Processes: Development of Systems Design through physical and digital modeling, drawing both orthographic and axonometric, amd 3d visualization

 Students will develop their project with consideration primary active systems required for maintaining comfort and performance and balancing energy loads- active system and primary building service systems. The physical integration of these systems within the building envelope is the main objective.

This assignment consists of 2 key parts

3.1. Integration of Active Systems for environmental control (heating, cooling, ventilation, lighting)

3.2. Integration of Building Service Systems (energy systems, mechanical, electrical, plumbing, life safety, AV/Security)

Assessment/grading criteria used to generate grading rubrics.

Criteria below will be used in a matrix that is aligned with each sub assignment

- 1) Develops strategies for integrating active systems for environmental control with the conceptual design (NAAB B.6)
- 2) Develops the project through a clear systems design that successfully integrates the primary building service systems with the conceptual building envelope (NAAB B.7, B.9)
- 3) Clear integrative approach and design decision making (NAAB C.2)
- 4) Integrative design approach- integration of multiple strategies in the creation of a holistic design (NAAB C.3)

# Part 4: BUILDING AND SITE DESIGN due April 14

Activities and Processes: Development of Building Design through drawing both orthographic and axonometric, 3d visualization, digital and physical modeling, and detailed drawings

- Students will develop their project into a fully integrated building and site taking into consideration the primary physical and spatial systems of architecture and enclosure along with the dynamic systems of environmental control, energy, water and resource management
  - 4.1: Site Integration strategies for implementing micro units on multiple sites at multiple scales, massing and orientation in response to site
  - 4.2. Networked Systems- strategies for integrating and interconnecting with the larger site

- 4.3. Dynamic Systems and responsive architecture
- 4.3. Final material strategies and feasibility, details and specifications
- Assessment/grading criteria used to generate grading rubrics.

Criteria below will be used in a matrix that is aligned with each sub assignment

- 1) Develops strategies for responding to dynamic forces of time, season and climate and availability of resources
- 2) Develops the project through clear drawings that describe a developed building design successfully integrating all the systems into an architectural project
- Project successfully demonstrates ability to apply local codes and regulations in the building design and the development of plans, sections and elevations and selection of the appropriate building systems (NAAB B.3)
- 4) Detailed technical documentation of the project through technical drawings, specifications and feasibility projections (NAAB B.4, B.10)

# Final Presentation: TBD

Activities and Processes: Development of Building Design through drawing both orthographic and axonometric, 3d visualization, digital and physical modeling, and detailed drawings

- The final presentation compiles and presents the work of the semester alongside a culminating large-scale model. A final model of the proposed project demonstrates the comprehensive qualities of the project and is intended to articulate the interrelationships between the site and building and the integration of primary and detailed building systems. The final assignment consists of the following parts
- Final Presentation: Assignment 1-4 combined and large-scale sectional model of project
- The final presentation will be a comprehensive evaluation of the work of the entire semester and will be graded on the basis of all Learning Outcomes for this course and NAAB Criteria A.4, A.5, B.2, B.3, B.4, B.6, B.7, B.8, B.9, B.10, C.2, and C.3
- Assessment/grading criteria used to generate grading rubrics.

Criteria below will be used in a matrix that is aligned with each sub assignment

- 1) Develops clear Conceptual strategies in response to site, develops clear passive design strategies of massing, orientation and passive heating and cooling (NAAB A.4, A.5, B.2, C.2)
- 2) Conceptual Building Envelope responds appropriately to site and design criteria, passive design goals (NAAB B.2, B.6, B.7)
- 3) Systems integration of building service systems and active environmental control in the creation of a holistic design (NAAB B.6, B.8, B.9)
- Project successfully demonstrates ability to apply local codes and regulations in the building design and the development of plans, sections and elevations and selection of the appropriate building systems (NAAB B.3)
- 5) Detailed technical documentation of the project through technical drawings (NAAB B.4)
- 6) Clear integrative approach and design decision making (NAAB C.2)
- 7) Develops the project through clear drawings that describe a developed building design successfully integrating all the systems into an architectural project (NAAB C.3)

# Estimate of Costs

Students should expect to expend the necessary resources to produce drafts and final for each assignment. Printing costs are depending upon current pricing and plotting costs established by the university (please see labs) and specific design solutions and material requirements for modeling materials. Estimated printing and model making costs detailed below.

Printing budget: \$500 Model making costs: \$400

There will be field trips during the semester, estimated cost \$100.

#### **Attendance Policy**

Students are expected to attend each session of class to not miss key lectures, discussions and feedback. Review of assignments, presentations and critique will be presented during class time. It is not possible to make up missed lectures, discussion or critique. If a presentation is missed the material intended to be presented on that date must be submitted complete to moodle and physically presented at the next class session.

#### **Moodle Policy**

Readings and assignments will be posted to moodle. Students are expected to download materials from moodle and be familiar with the material and prepared to discuss these materials in class. Students are responsible for posting all assignments by the assignment due date.

#### DEPARTMENT POLICIES AND PROCEDURES

#### **Requirements for Documentation and Archiving**

Every student is responsible for digitally archiving their work. An assignment that has not been digitally archived will be considered incomplete and will not receive credit. Please use the process provided by your instructor to produce a single PDF document for each assignment. Failure to submit the required documentation in usable format may result in a grade reduction in the final grade of the semester. Documentation of the studio work is essential for the NAAB accreditation process and assessment of the architecture program.

The university reserves the right to retain student work for archival purposes. Projects/models, assignments, and exams will be kept at the department's discretion for this purpose. Students will be asked to help with archiving their projects at the end of the semester.

#### Writing Requirements

All written work must meet the standards for English. Poorly written papers may be returned without a grade for revision and resubmission, and may be subject to grade reduction. Students are encouraged to utilize the Woodbury Writing Center.

#### **Studio Culture**

The studio environment is an essential component in learning to become an architect. One goal of the School of Architecture is to create a vibrant, exploratory, safe and respectful learning culture for students. Only through respect between faculty and students, as well as students among themselves, can a healthy educational studio culture be fostered. Students are required to uphold high standards of behavior and academic discipline while in the studio. See the full Studio Guidelines and Studio Culture Policy for more information.

#### School Policy on Social Equity and Diversity

Our mission is to provide an environment where people can learn, teach and work with a shared sense of purpose, core values and respect without bias towards individual beliefs, values and areas of difference. We do this in an effort to create a community that respects and values the full and equal inclusion of its members. Our goal is to provide an environment that is welcoming and inclusive of all.

#### Accommodations for students with identified disabilities

Woodbury University is committed to making reasonable accommodations to assist individuals with disabilities in reaching their academic potential. Students desiring accommodations due to a physical, learning or psychological disability must first complete an Accommodations Request Form, which can be downloaded from http://go.woodbury.edu, and found under "Academic Resources." Accommodations cannot be granted prior to the instructor's receipt of a Notification of Special Needs Release Form from the Disabilities Coordinator. Accommodations are never provided retroactively. (For more information, contact the Disabilities Coordinator in the Whitten Center (818) 394-3345.)

#### Academic Honesty

Because the integrity of the academic enterprise of any institution of higher education requires honesty in scholarship and research, academic honesty is required at Woodbury University. Academic integrity is important for two reasons: first, independent and original scholarship ensures that students and scholars derive the most from their educational experience and the pursuit of knowledge. Second, academic dishonesty violates the most fundamental values of a community of scholars and depreciates the achievements of the entire University community. Accordingly, Woodbury University views academic dishonesty as one of the most serious offenses that a member of our community can commit. Adherence to the Academic Honesty Policy reflects the commitment of our community to the ideals of learning, research, and scholarship. See Catalog for the entire Academic Honesty Policy.

#### Grade Requirements

Refer to the Woodbury University catalog for grading standards and policies.

#### Environmental Responsibility

Studio projects shall be designed in a socially and environmentally responsible manner. All projects should reduce dependencies on non-renewable resources.

#### **Class Attendance**

It is mandatory that students take advantage of all scheduled course time. Regular attendance at EVERY class is expected throughout the duration of the class/studio time. Arrival at the beginning of the class period is required. Lateness or early departure will be considered as an absence. Regular and prompt attendance at all university classes is required. The instructor is not obligated to assign extra work or to prepare additional examinations for classes missed. It is understood that when 15% of the class time has been missed, the student's absence rate is excessive. Each instructor will announce his/her attendance policy in the course syllabus.

#### **Excused Absence**

Students should report any illness or emergency to their course instructor, preferably before missing the class, by emailing the instructor. Written documentation (doctor's note, etc.) is required for an excused absence, and should be submitted to the instructor at the next class meeting. Extended absence due to medical issues, family issues, etc. should be reported to the Dean of Students' office for appropriate documentation.

Students who anticipate absence due to religious observance or similar commitments should speak with their instructor at the start of the term to review all dates in question and develop a plan to meet all course requirements.

#### Email

Students are advised to meet with their instructors during posted office hours. Face-to-face communication in discussing and resolving problems is preferable to email exchanges. Additionally, meetings must be scheduled in advance using email correspondence. Email correspondence must be written in a respectful and professional manner. It is the student's responsibility to consistently check for email.

#### **Grievance Protocol**

Students should use the following protocol for questions, grievances, or general concerns about coursework and the studio environment. Health and safety concerns and emergencies should immediately be directed to campus security (818-252-5208). Academic concerns should be directed first to the student's instructor, and then to the studio coordinator as appropriate. If further consultation is required, the student is advised to meet with the Coordinator and/or the Department Chair.

#### **Class Syllabus and Structure**

While every effort will be made to follow the outline of the published syllabus, course structure and calendar may be changed at the instructor or coordinator's discretion. Announcements will be made if such changes occur. Students who miss class are responsible for tracking any such announcements.
### Calculation Of Grade

Letter grades are converted to numeric values using the following values:

Letter	GPA	%	Definition
A	4.00-3.84	96-100	Student learning and accomplishment far exceeds published objectives for the course/test/assignment and student work is distinguished consistently by is high level of competency and/or innovation.
A-	3.83-3.50	92-95	
B+	3.49-3.17	88-91	Student learning and accomplishment goes beyond what is expected in the published objectives for the course/test/assignment and student
В	3.16-2.84	84-87	work is frequently characterized by its special depth of understanding, development, and/or innovative experimentation.
В-	2.83-2.50	80-83	Students learning and accomplishment meets all published objectives for the course/test/assignment and the student work demonstrates the expected level of understanding, and application of concepts introduced.
C+	2.49-2.17	76-79	
С	2.16-1.84	72-75	
C-	1.83-1.50	68-71	Student learning and accomplishment based on the published objectives for the course/test/assignment were met with minimum
D+	1.49-1.17	64-67	passing achievement.
D	1.16-0.60	60-63	
F	0.00-0.60	< 60	Student learning and accomplishment based on the published objectives for the course/test/assignment were not sufficiently addressed nor met.

# Syllabi B.2 Accessibility (B. Arch & M. Arch)

# Woodbury University School of Architecture **Professional Practice I – Documentation and Codes** ARCH 250

Semester:	Spring 2020
Time:	Monday 9:00 - 10:15AM, 11:30-11:45 AM Wednesday 9:00 - 10:15AM, 11:30-11:45 AM
Location:	School of Business B209
Instructors:	Mark Owen ( <u>mark.owen@woodbury.edu</u> ) Robert Kerr ( <u>Robert.kerr@woodbury.edu</u> )

Office Hours: By appointment

# Catalog Description

Legal codes and regulations that affect architecture and influence design are reviewed, including a study of energy, accessibility, egress, and life-safety. The development of project documentation based on local codes is studied, with an emphasis on technical documentation, drawing format organization, and outline specifications.

Three-unit Lecture. Prerequisites: ARCH 211, Design Communication 2 and ARCH 183, Design Studio 1B.

# Learning Outcomes

Upon completion of this course, it is expected that students will be able to:

Technical Documentation: Ability to make technically clear drawings, write outline specifications, and prepare models illustrating and identifying the assembly of materials, systems, and components appropriate for a building design via the application of Revit software.

Accessibility: Ability to design sites, facilities, and systems to provide independent and integrated use by individuals with physical (including mobility), sensory, and cognitive disabilities.

Life Safety: Ability to apply the basic principles of life-safety systems with an emphasis on egress.

Building Materials and Assemblies: Understanding of the basic principles utilized in the appropriate selection of construction materials, products, components, and assemblies, based on their inherent characteristics and performance, including their environmental impact and reuse.

Client Role in Architecture: Understanding of the responsibility of the architect to elicit, understand, and reconcile the needs of the client, owner, user groups, and the public and community domains.

Project Management: Understanding of the methods for competing for commissions, selecting consultants and assembling teams, and recommending project delivery methods.

Practice Management: Understanding of the basic principles of architectural practice management such as financial management and business planning, time management, risk management, mediation and arbitration, and recognizing trends that affect practice.

Leadership: Understanding of the techniques and skills architects use to work collaboratively in the building design and construction process and on environmental, social, and aesthetic issues in their communities.

Legal Responsibilities: Understanding of the architect's responsibility to the public and the client as determined by registration law, building codes and regulations, professional service contracts, zoning and subdivision ordinances, environmental regulation, and historic preservation and accessibility laws.

Ethics and Professional Judgment: Understanding of the ethical issues involved in the formation of professional judgment regarding social, political and cultural issues in architectural design and practice.

# NAAB Student Performance Criteria Introduced

### **B.3: Codes and Regulations**

Ability to design sites, facilities and systems consistent with the principles of lifesafety standards, accessibility standards, and other codes and regulations.

# **B.4: Technical Documentation**

Ability to make technically clear drawings, prepare outline specifications, and construct models illustrating and identifying the assembly of materials, systems, and components appropriate for a building design.

# **B.10: Financial Considerations**

Understanding of the fundamentals of building costs, which must include project financing methods and feasibility, construction cost estimating, construction scheduling, operational costs, and life-cycle costs.

# **Course Description**

An introduction to the architect's core technical and regulatory practice, including alternate practice methodologies that expand the traditional role of the architect.

Legal codes and regulations that affect architecture and influence design are reviewed, including a study of energy, accessibility, egress, and life-safety. The development of project documentation based on local codes is studied, with an emphasis on technical documentation, drawing format organization, and outline specifications.

Additionally, within the primary focus of the course, other corollary practices that have the ability of broadening the role of the architect will be reviewed to both prepare for future design studios and alternate career paths. Lecture topics will also include strategic partnering, project delivery strategies, marketing & branding strategies and opportunities, and construction / project management.

### Schedule and Deliverables

Schedule is attached via separate document.

# Final Grade Calculation

Grades are measured by a series of assignments based on milestones for the Revit model, as outlined on the Course Schedule. A series of points will be possible for every assignment, the final

project at the end of the semester and participation during the semester. The final project consists of 20% of the total points, and the Participation portion is 5%.

# Assignments and Assessment

Attached to the schedule are point values and percentages of course assignments and class expectations. The points are broken into 3 categories:

- Class participation and assignments
- ADA Project
- Final Project

Class participation points vary depending on the expectations of each assignment. For typical assignments, students fulfill a set of criteria handed out prior to the presentation.

Levels of accomplishment

-*Understanding:* Have the capacity to classify, compare, summarize, explain and/or interpret information. Students can correctly paraphrase or summarize information without necessarily being able to relate it to other material or see its fullest implications.

-*Ability:* proficiency in using specific information to accomplish a task, correctly selecting the appropriate information, and accurately applying it to the solution of a specific problem, while also distinguishing the effects of its implementation.

### NAAB Criteria Satisfied

A.4	Technical Documentation	ability
B.2	Accessibility	ability
B.5	Life Safety	ability
C.1	Collaboration	ability
C.2	Human Behavior	ability
C.3	Client Role in Architecture	understanding
C.4	Project Management	understanding
C.5	Practice Management	understanding
C.6	Leadership	understanding
C.7	Legal Responsibility	understanding
C.8	Ethics and Professional Judgment	understanding
		•

School of Architecture Tracks of Mastery

1	Critical Thinking	practiced: Background	
2	Design	practiced: Background	
3	Building	practiced	

- 4 Representation practiced: High Importance
- 5 Professionalism practiced: High Importance

# **Estimate of Costs**

Additional costs will be limited to occasional printing of materials for review by the instructors. No other costs should be incurred by students.

# Attendance Policy

When over 15% of the class time has been missed a student's absence rate is considered excessive. Any student having unexcused absences more than 15% of the class time will receive one full letter grade deduction from their overall earned grade. For every subsequent unexcused absence an additional full letter grade reduction will apply to their final earned grade. Two late arrivals (of more than 15 minutes) will be considered as one unexcused absence. Students not present at the end of the class will be counted as absent.

Grades will be given for each assignment, test, or project on and only on the day it is due and cannot be remediated. The grade for a missing assignment, test, or project will be a "0". It is advisable to turn-in incomplete work rather than present nothing at all or be absent.

Even with excused absences it is up to the instructor to determine whether the amount of time missed by a student prohibits them from passing a class. Excessive excused or unexcused absences prohibit a student's understanding, retention and completion of the course work. See Woodbury's catalogue for justified incomplete and final withdrawal dates for the semester.

Final course grades may not be changed as a result of students' submitting additional work, repeating examinations, or taking additional examinations after the conclusion of the course. See the University catalog for Policy on Incomplete Grades; there will be no exceptions.

There will be a zero tolerance policy towards disruptive behavior. Students' behavior that obstructs or disrupts the campus educational process (including personal discussions during critiques or presentations, or working on other classes during studio time) will be asked to leave the class and will be considered absent for the session without excuse.

See attached Policy on Academic Honesty. Unless specifically assigned, group or team efforts on individual solutions or projects will be considered to have violated academic honesty and appropriate disciplinary action will be taken which may include refusal of course credit, probation, suspension, or expulsion.

# SPECIAL NEEDS ACCOMMODATIONS

Woodbury University is committed to making reasonable accommodations to assist individuals with disabilities in reaching their academic potential. Students desiring accommodations due to a physical, learning or psychological disability must first complete an *Accommodations Request Form*, which can be downloaded from<u>http://go.woodbury.edu</u>, and found under "Academic Resources." Accommodations cannot be granted prior to the instructor's receipt of a *Notification of Special Needs Release Form* from the Disabilities Coordinator. Accommodations are never provided retroactively. (For more information, contact the Disabilities Coordinator in the Whitten Center (818) 394-3345.)

### **Moodle Policy**

Assignments and all lectures will be posted on Moodle prior to class for review in preparation for each class.

### DEPARTMENT POLICIES AND PROCEDURES

### **Requirements for Documentation and Archiving**

Each student must submit documentation of the full semester's work at the end of each term, in pdf format. Materials should include research, writing, and design work, including important study models and sketches. Studio faculty will further define how this work should be organized and presented before the end of the semester. Failure to submit the required documentation in usable format may result in a grade reduction in the final grade of the semester. Documentation of the studio work is essential for the NAAB accreditation process and assessment of the architecture program.

The university reserves the right to retain student work for archival purposes. Projects/models, assignments, and exams will be kept at the department's discretion for this purpose. Students will be asked to help with archiving their projects at the end of the semester.

### Writing Requirements

All written work must meet the standards for English. Poorly written papers may be returned without a grade for revision and resubmission, and may be subject to grade reduction. Students are encouraged to utilize the Woodbury Writing Center. Link is <u>here</u>.

### Studio Culture

The studio environment is an essential component in learning to become an architect. One goal of the School of Architecture is to create a vibrant, exploratory, safe and respectful learning culture for students. Only through respect between faculty and students, as well as students among themselves, can a healthy educational studio culture be fostered. Students are required to uphold high standards of behavior and academic discipline while in the studio. See the full Studio Guidelines and Studio Culture Policy for more information.

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### **Universal Pedagogy**

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### **Academic Honesty**

Students are responsible for familiarizing themselves with Woodbury's Student Code of Conduct, which can be found in the Catalog. Academic misconduct, dishonesty, plagiarism, and cheating will not be tolerated and may lead to failure of the course.

#### **Grade Requirements**

Refer to the Woodbury University catalog for grading standards and policies.

#### **Environmental Responsibility**

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#### **Class Attendance**

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Students who anticipate absence due to religious observance or similar commitments should speak with their instructor at the start of the term to review all dates in question and develop a plan to meet all course requirements.

#### Email

Students are advised to meet with their instructors during posted office hours. Face-to-face communication in discussing and resolving problems is preferable to email exchanges. Additionally, meetings must be scheduled in advance using email correspondence. Email correspondence must be written in a respectful and professional manner. It is the student's responsibility to consistently check for email.

#### **Grievance Protocol**

Students should use the following protocol for questions, grievances, or general concerns about coursework and the studio environment. Health and safety concerns and emergencies should immediately be directed to campus security (818-252-5208). Academic concerns should be directed first to the student's instructor, and then to the studio coordinator as appropriate. If further consultation is required, the student is advised to meet with the Undergraduate or Graduate Chair.

### **Class Syllabus and Structure**

While every effort will be made to follow the outline of the published syllabus, course structure and calendar may be changed at the instructor or coordinator's discretion. Announcements will be made if such changes occur. Students who miss class are responsible for tracking any such announcements.

### Calculation Of Grade

Letter grades are converted to numeric values using the following values:

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В	3.16-2.84	84-87	work is frequently characterized by its special depth of understanding, development, and/or innovative experimentation.
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C+	2.49-2.17	76-79	
С	2.16-1.84	72-75	
C-	1.83-1.50	68-71	Student learning and accomplishment based on the published objectives for the course/test/assignment were met with minimum
D+	1.49-1.17	64-67	passing achievement.
D	1.16-0.60	60-63	
F	0.00-0.60	< 60	Student learning and accomplishment based on the published objectives for the course/test/assignment were not sufficiently addressed nor met.

# Woodbury University School of Architecture Environmental Systems ARCH 425 S1 and ARCH 425 S2

Semester:	Spring 2020
Time:	Monday, Wednesday 1:15 - 2:30 PM
Location:	AB108
Instructor:	Jacob Chan
Office Hours:	e-mail instructor for appointment

### **Catalog Description**

Human comfort, climate analysis, passive and active systems, heating and cooling, day lighting and acoustics are reviewed. This survey, with a special emphasis on sustainable design, provides an understanding of the basic principles and appropriate application and performance of building systems including heating, cooling, and ventilation systems; electrical and plumbing distribution systems; lighting, acoustical, energy, waste, fire protection, security and hazardous material systems.

Three Unit Lecture. Prerequisites: PHYS 241, Physics II or PHYS 243, Physics for Architects and ARCH 281, Design Studio 2A:

### Learning Outcomes

Upon completion of this course, it is expected that students will be able to:

- Students will advance their skills to formulate a clear disciplinary position supported by relevant texts and contemporary precedents, and incorporate that position into advanced representations of a building proposal. Develop the skills to work independently and successfully design an integrative building project. Students will advance skills in critical thinking and apply knowledge in design. Students will advance skills in the professional communication of architectural concepts using the mediums of drawing, modeling and verbal and a short written presentation.
- 2. Precedent Analysis
  - a. Designing for different climate zones and their impact on building construction
  - b. Designing with Energy Codes
  - c. Designing with Building Layouts with allocation of equipment area
- 3. Developing a comprehensive energy site
  - a. Designing active and passive heating cooling systems
  - b. Building systems
  - c. Natural ventilation and indoor air quality
  - d. Acoustic

### NAAB Student Performance Criteria B.6: Environmental Systems

Understanding the principles of environmental systems' design, how systems can vary by geographic region, and the tools used for performance assessment. This must include active and passive heating and cooling, indoor air quality, solar systems, lighting systems, and acoustics. Real life past projects will be discussed at the class and the students will participate with discussion about their view and comments on the design. The students will propose their alternative ideas on system design.

**Student Work:** Terminology, techniques and examples are provided in lectures and assigned references. Terminology, fundamental principles and historical examples are tested as part of regular quizzes. Extensive use of site-specific energy measurement and simulation tools provide the means for the performance assessment of existing and transformed precedent course project.

B.6.1 Passive & Activing heating & cooling; Quiz + diagram

- B.6.2 Solar Geometry; Quiz + simulation/measurement
- B.6.3 Daylighting; Quiz + simulation + simulation/measurement
- B.6.4 Natural Ventilation; Quiz + simulation/research
- B.6.5 Indoor Air Quality; Quiz
- B.6.6 Solar Systems; Quiz
- B.6.7 Lighting Systems: Quiz + diagram
- B.6.8 Acoustics: Quiz + diagram

# NAAB Student Performance Criteria Introduced B.3: Codes and Regulations

Ability to design sites, facilities and systems consistent with the principles of life-safety standards, accessibility standards, and other codes and regulations.

Student Work: Course will take regular quizzes based on case studies and precedent performance.

- B.9.1 Mechanical; Quiz
- B.9.2 Plumbing; Quiz
- B.9.3 Electrical; Quiz
- B.9.4 Communication; Quiz
- B.9.5 Vertical transportation; Quiz
- B.9.6 Security; Quiz
- B.9.7 Fire Protection; Quiz

### **Course Description**

The students will learn each individual engineering discipline with a building environment. The course will cover the following

- 1. mechanical ventilation and air conditioning,
- 2. power distribution including normal, emergency and standby power,
- 3. plumbing system including storm drains, water supply, storm drains, wastes including sewer and food waste treatment,
- 4. life safety system including smoke evacuation, fire sprinkler protection, fire alarm and detection system,
- 5. communication includes voice and data distribution, Wireless LAN, 5G, distributed antenna system,
- 6. security system includes alarm, monitoring, CCTV,
- 7. vertical transportation system includes elevators and escalators,
- 8. façade

4/1/2020

1.15-2.30pm

- 9. acoustic
- 10. sustainable approach

# **Schedule and Deliverables**

Provide a schedule and deliverables list for the semester. The class schedule is as follows:

Woodbury	Spring Semester	Arch 425 S1 – 1.15pm to 2.30pm Arch 425 S 2 – 2.45pm to 4.00pm
Date	Session see Note 1	Lecture
1/13/2020	1.15-2.30pm	Introduction 1
1/15/2020	1.15-2.30pm	Introduction 2
1/20/2020	1.15-2.30pm	MLK
1/22/2020	1.15-2.30pm	Project Examples 1
1/27/2020	1.15-2.30pm	Project Examples 2
1/29/2020	1.15-2.30pm	Electrical System 1
2/3/2020	1.15-2.30pm	Electrical System 2
2/5/2020	1.15-2.30pm	Electrical Application
2/10/2020	1.15-2.30pm	Mechanical System 1
2/12/2020	1.15-2.30pm	Mechanical System 2
2/17/2020	1.15-2.30pm	President Day
2/19/2020	1.15-2.30pm	Mechanical System Application
2/24/2020	1.15-2.30pm	What If - Innovation Design Approach
2/26/2020	1.15-2.30pm	Vertical Transportation
3/2/2020	1.15-2.30pm	Plumbing System
3/4/2020	1.15-2.30pm	Case Study Wilshire Grand
3/9/2020	1.15-2.30pm	No Class , Spring break
3/11/2020	1.15-2.30pm	No Class , Spring break
3/16/2020	1.15-2.30pm	Acoustic
3/18/2020	1.15-2.30pm	Case Study London Millennium Bridge
3/23/2020	1.15-2.30pm	Communication
3/25/2020	1.15-2.30pm	No Class Cesar Chavez Day
3/30/2020	1.15-2.30pm	Case Study LACMA

**Fire Protection** 

# Note 1

4/6/2020	1.15-2.30pm	Photovoltaic System
4/8/2020	1.15-2.30pm	Wind Turbine System
4/13/2020	1.15-2.30pm	Lighting
4/15/2020	1.15-2.30pm	Day Lighting and Humidity Control
4/20/2020	1.15-2.30pm	Summary
4/22/2020	1.15-2.30pm	No Class , work on Studio
4/27/2020	1.15-2.30pm	No Class , work on Studio

At the end of each class, the students will complete a quiz based on the lecture subjects. Each quiz will be marked and a grade will be assigned based on the corrections to questions listed in the quiz. Each student will submit the quiz at the end of each class.

### **Final Grade Calculation**

The final grade is the average of the entire quiz for the semester.

### DEPARTMENT POLICIES AND PROCEDURES

#### **Requirements for Documentation and Archiving**

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dishonesty as one of the most serious offenses that a member of our community can commit. Adherence to the Academic Honesty Policy reflects the commitment of our community to the ideals of learning, research, and scholarship. See Catalog for the entire Academic Honesty Policy.

### **Grade Requirements**

Refer to the Woodbury University catalog for grading standards and policies.

### **Environmental Responsibility**

Studio projects shall be designed in a socially and environmentally responsible manner. All projects should reduce dependencies on non-renewable resources.

#### **Class Attendance**

It is mandatory that students take advantage of all scheduled course time. Regular attendance at EVERY class is expected throughout the duration of the class/studio time. Arrival at the beginning of the class period is required. Lateness or early departure will be considered as an absence. Regular and prompt attendance at all university classes is required. The instructor is not obligated to assign extra work or to prepare additional examinations for classes missed. It is understood that when 15% of the class time has been missed, the student's absence rate is excessive. Each instructor will announce his/her attendance policy in the course syllabus.

#### Excused Absence

Students should report any illness or emergency to their course instructor, preferably before missing the class, by emailing the instructor. Written documentation (doctor's note, etc.) is required for an excused absence, and should be submitted to the instructor at the next class meeting. Extended absence due to medical issues, family issues, etc. should be reported to the Dean of Students' office for appropriate documentation.

Students who anticipate absence due to religious observance or similar commitments should speak with their instructor at the start of the term to review all dates in question and develop a plan to meet all course requirements.

### Email

Students are advised to meet with their instructors during posted office hours. Face-to-face communication in discussing and resolving problems is preferable to email exchanges. Additionally, meetings must be scheduled in advance using email correspondence. Email correspondence must be written in a respectful and professional manner. It is the student's responsibility to consistently check for email.

### **Grievance Protocol**

Students should use the following protocol for questions, grievances, or general concerns about coursework and the studio environment. Health and safety concerns and emergencies should immediately be directed to campus security (818-252-5208). Academic concerns should be directed first to the student's instructor, and then to the studio coordinator as appropriate. If further consultation is required, the student is advised to meet with the Coordinator and/or the Department Chair.

### **Class Syllabus and Structure**

While every effort will be made to follow the outline of the published syllabus, course structure and calendar may be changed at the instructor or coordinator's discretion. Announcements will be made if such changes occur. Students who miss class are responsible for tracking any such announcements.

### **Calculation Of Grade**

Letter grades are converted to numeric values using the following values:

Letter	GPA	%	Definition
A	4.00-3.84	96-100	Student learning and accomplishment far exceeds published objectives for the course/test/assignment and student work is distinguished consistently by is high level of competency and/or innovation.
A-	3.83-3.50	92-95	
B+	3.49-3.17	88-91	Student learning and accomplishment goes beyond what is expected in the published objectives for the course/test/assignment and student work is frequently characterized by its special depth of understanding, development, and/or innovative experimentation.
В	3.16-2.84	84-87	
B-	2.83-2.50	80-83	Students learning and accomplishment meets all published objectives for the course/test/assignment and the student work demonstrates the expected level of understanding, and application of concepts introduced.
C+	2.49-2.17	76-79	
С	2.16-1.84	72-75	
C-	1.83-1.50	68-71	Student learning and accomplishment based on the published objectives for the course/test/assignment were met with minimum
D+	1.49-1.17	64-67	passing achievement.
D	1.16-0.60	60-63	
F	0.00-0.60	< 60	Student learning and accomplishment based on the published objectives for the course/test/assignment were not sufficiently addressed nor met.

# Woodbury University School of Architecture Studio 4A ARCH 487

Semester: Fall 2019

Time: Tuesday / Friday 1:15-6:15 pm

Location:

Instructors: Matthew Gillis, Stephen Marshall, Eric Olsen, Linda Taalman

Office hours: e-mail instructor for appointment

### **Catalog Description**

Students produce a comprehensive architectural project based upon a building program and site that includes the development of programmed space, demonstrating an understanding of structural and environmental systems, life-safety provisions, wall sections, building assemblies, and the principles of sustainability. The studio is open to fourth- and fifth-year students. The last half of the semester will be devoted to design development.

Six unit Studio. Prerequisites: ARCH 384, Studio 3B, ARCH 326, Structures 1; and ARCH 425, Environmental Systems. Corequisite: ARCH 464 Systems Integration.

# Learning Outcomes

Upon completion of this course, it is expected that students will be able to:

- 1. Conceptualize well thought out design solutions, in response to specific site and passive design considerations, incorporating techniques of siting, massing, orientation and passive heating and cooling.
- Develop through Representations (visualizations and modeling) design decisions and design strategies for the integration of building systems, specifically with regards to the design development of building envelope, materials and assemblies and services that serve and integrate with primary circulation, structure and active systems.
- Design and Document a Comprehensive project taking into consideration precedents, local codes and regulations, and the selection and integration of appropriate building systems. Documentation to include clear technical documentation of the project including site and floor plans, sections and elevations and detailed wall sections.
- 4. Develop an understanding of an Integrative Design Approach, and a holistic understanding of the interrelationship of systems in the execution of a complex architectural project that is mindful of the environment and sustainability.
- 5. Use critical thinking skills and problem solving learned in all previous design studios to design a building that responds to contemporary and relevant social and civic problems facing the profession of architecture today.

# NAAB Student Performance Criteria Mastered

### B.2: Site Design

Ability to respond to site characteristics including urban context and developmental patterning, historical fabric, soil, topography, climate, building orientation, and watershed in the development of a project design.

### **B.3: Codes and Regulations**

Ability to design sites, facilities and systems consistent with the principles of lifesafety standards, accessibility standards, and other codes and regulations.

### **B.4: Technical Documentation**

Ability to make technically clear drawings, prepare outline specifications, and construct models illustrating and identifying the assembly of materials, systems, and components appropriate for a building design.

### C.2: Integrative Evaluation and Decision-Making Design Processes

Ability to demonstrate the skills associated with making integrated decisions across multiple systems and variables in the completion of a design project. This demonstration includes problem identification, setting evaluative criteria, analyzing solutions, and predicting the effectiveness of implementation.

### C.3: Integrative Design

Ability to make design decisions within a complex architectural project while demonstrating broad integration and consideration of environmental stewardship, technical documentation, accessibility, site conditions, life safety, environmental systems, structural systems, and building envelope systems and assemblies.

# Course Description

This year's Studio 4A will focus on the questioning of how technological developments affect architecture both programmatically and performatively through the problem of housing and the effects of climate change on our environment. Each studio will take on a specific site and approach to this civic institution.

The studio will question how architecture and the built environment play a role in shaping our behavior as much as it is a container for controlling climate. The integration of technology and the design of our spaces intersect to create new experiences and environments.

Studio 4A is the Comprehensive Design Studio, in which students will develop a complex architectural project to a design development level that culminates in a highly detailed documentation of their design. Each project is expected to incorporate the essential aspects of design – site, circulation, structural and environmental systems with more detailed and integrated design decisions in terms of building envelope, building material and building service systems. The framework of the studio is rigorous in its effort to guide the student to this advanced level of development and the pace of the studio rapidly progresses from conceptualization to design development. Students' projects are expected to incorporate a technical level of detail and understanding, from local codes and regulations, including ADA and life safety, to conventions of architectural documentation, including detailed drawings and specifications. The studio will make use of multiple methodologies of design in the visualization and development of the projects, incorporating projective and axonometric drawings, physical and digital modeling, and graphic representations.

Studio 4A is developed in tandem with the ARCH 464 Systems Integration course and together they integrate the tools and knowledge necessary to develop a fully integrative Comprehensive Design project. Through lectures, in-class critiques and consultant round tables the studio and seminar will introduce the students to a spectrum of design and engineering professionals, giving students the opportunity to have direct feedback on their design projects.

# Schedule and Deliverables

Schedule and deliverables subject to change. September 17- Concept Design presentation (Assignment 1) October 18- Midterm presentation: Building Design (Assignment 2) November 15- Design documentation presentation (Assignment 3) December 6- Studio Final presentation (incorporates Ass. 1-3 and Final Presentation req.)

# Final Grade Calculation

- 20% Concept Design
- 20% Midterm Presentation
- 20% Design Documentation
- 30% Final Presentation
- 10% Overall development, Attendance and Participation in studio

# **Assignments and Assessment**

The Assignments progress quickly from conceptualizing to building design and detailed development of the project to produce a highly resolved and comprehensive project. Each Assignment and sub part build on the last and adds a level of complexity and further re-evaluation to produce a thoughtful integrated solution.

Assignment 1: Concept Design

• Students will conceptually develop the site and program given through critical analysis of precedents, analysis of the site, passive design in response to the site conditions, and thoughtful development of the program into clear massing strategies.

This assignment consists of 3 key parts

Part 1: Precedent Research Analysis (plan, section and 3d)

Part 2: Site model and Site diagrams

Part 3: Program and Massing diagrams and models

- Learning outcomes 1 and 2 and NAAB criteria B.2 (Site Design), C.2 (Integrative Evaluation and Decision-Making Design Processes) and C.3 (Integrative Design)
- Assessment/grading criteria used to generate grading rubrics.

Criteria below will be used in a matrix that is aligned with each sub assignment

- 1) Analysis and Research (LO 1)
- Develops clear Conceptual strategies in response to site and precedent, develops clear passive design strategies of massing, orientation and passive heating and cooling (NAAB B.2, LO 2)
- 3) Clear integrative approach and design decision making (NAAB C.2)
- 4) Integrative design approach- integration of multiple strategies in the creation of a holistic design (NAAB C.3)

Assignment 2: Building and Envelope Design

• Students will develop their project into a building taking into consideration the primary physical and spatial systems of architecture- circulation, structure, envelope and active systems. The physical integration of these primary systems with the Concept Design and their compatibility with the site and passive design strategies is the key objective.

This assignment consists of 3 key parts

Part 1: Building Circulation diagrams and models

Part 2: Building Structural diagrams and models

- Part 3: Envelope diagrams and models describing spatial and systems strategies
- Learning outcomes 3 and NAAB criteria C.2 (Integrative Evaluation and Decision-Making Design Processes) and C.3 (Integrative Design)

• Assessment/grading criteria used to generate grading rubrics.

Criteria below will be used in a matrix that is aligned with each sub assignment

- 1) Develops the project through representation of a clear building design that successfully integrates the primary physical systems with the conceptual design (LO 3)
- 2) Conceptual Building Envelope responds appropriately to site and design criteria, and passive design goals (NAAB B.2, LO 3)
- 3) Clear integrative approach and design decision making (NAAB C.2)
- 4) Integrative design approach- integration of multiple strategies in the creation of a holistic design (NAAB C.3)

Assignment 3: Design Documentation

• Students will develop their project into a building taking into consideration the primary physical and spatial systems of architecture- circulation, structure, envelope and active systems. The physical integration of these primary systems with the Concept Design and their compatibility with the site and passive design strategies is the key objective.

This assignment is focused on the completion of the primary design documentation for the project as a series of black and white architectural drawings that clearly articulate the project.

- Part 1: Design Documentation
- Site Plan, Floor Plans, Elevations and Sections Part 2: Material Strategies and detail
- Detailed wall sections
- Material studies
- Learning outcomes 3 and 4 and NAAB criteria B.3 (Codes and Regulations) and B.4 (Technical Documentation)
- Assessment/grading criteria used to generate grading rubrics.

Criteria below will be used in a matrix that is aligned with each sub assignment

- 1) Develops the project through clear drawings that describe a developed building design successfully integrating all the systems into an architectural project (LO 3)
- Project successfully demonstrates ability to apply local codes and regulations in the building design and the development of plans, sections and elevations and selection of the appropriate building systems (LO 4 and NAAB B.3)
- 3) Detailed technical documentation of the project through technical drawings (NAAB B.4)

Assignment 4: Final Presentation

 The final presentation compiles and presents the work of the semester alongside a culminating large-scale model. A final model of the proposed project demonstrates the comprehensive qualities of the project and is intended to articulate the interrelationships between the site and building and the integration of primary and detailed building systems.

The final assignment consists of the following parts

- Final Presentation: Assignment 1-3 combined and large-scale sectional model of project
- The final presentation will be a comprehensive evaluation of the work of the entire semester and will be graded on the basis of all 5 Learning Outcomes for this course and NAAB Criteria B.3, B.4, C.2, and C.3
- Assessment/grading criteria used to generate grading rubrics.

Criteria below will be used in a matrix that is aligned with each sub assignment

- 1) Analysis and Research (LO 1)
- 2) Develops clear Conceptual strategies in response to site, develops clear passive design strategies of massing, orientation and passive heating and cooling (LO 2)
- 3) Develops the project through representation of a clear building design that successfully integrates the primary physical systems with the conceptual design (LO 3)
- 4) Conceptual Building Envelope responds appropriately to site and design criteria, and passive design goals (LO 3)
- 5) Develops the project through clear drawings that describe a developed building design successfully integrating all the systems into an architectural project (LO 3)
- 6) Project successfully demonstrates ability to apply local codes and regulations in the building design and the development of plans, sections and elevations and selection of the appropriate building systems (LO 4 and NAAB B.3)
- 7) Detailed technical documentation of the project through technical drawings (NAAB B.4)
- 8) Clear integrative approach and design decision making (NAAB C.2)
- 9) Integrative design approach- integration of multiple strategies in the creation of a holistic design (LO5 and NAAB C.3)

### Estimate of Costs

Students should expect to expend the necessary resources to produce drafts and final for each subpart of the Assignment. Printing costs are dependent on current printing and plotting costs established by the university (please see labs) and specific design solutions and material requirements for modeling materials. Estimated printing and model making costs detailed below.

Printing budget- \$500 Model making costs- \$500

### Attendance Policy

Students are expected to attend each session of studio to not miss key assignments, presentations, discussions and critique. It is impossible to make up a studio session- particularly when guests are visiting studio for discussions and critiques or for key presentations. If a presentation is missed the material intended to be presented on that date must be submitted complete to Moodle on the due date, and physically presented at the next class session.

# **Moodle Policy**

Assignments will be posted to Moodle; students are expected to download reading materials from Moodle according to the schedule and must be prepared to discuss these materials in class. Students are responsible for posting all assignments to Moodle by the assignment due date.

### DEPARTMENT POLICIES AND PROCEDURES

### Requirements for Documentation and Archiving Each student must submit documentation of the full semester's work at the end of each term, in pdf format. Materials should include research, writing, and design work, including important study models and sketches. Studio faculty will further define how this work should be organized and presented before the end of the semester. Failure to submit the required documentation in usable format may result in a grade reduction in the final grade of the semester. Documentation of the studio work is essential for the NAAB accreditation process and assessment of the architecture program.

The university reserves the right to retain student work for archival purposes. Projects/models, assignments, and exams will be kept at the department's discretion for this purpose. Students will be asked to help with archiving their projects at the end of the semester.

### Writing Requirements

All written work must meet the standards for English. Poorly written papers may be returned without a grade for revision and resubmission, and may be subject to grade reduction. Students are encouraged to utilize the Woodbury Writing Center. Link is <u>here</u>.

### Studio Culture

The studio environment is an essential component in learning to become an architect. One goal of the School of Architecture is to create a vibrant, exploratory, safe and respectful learning culture for students. Only through respect between faculty and students, as well as students among themselves, can a healthy educational studio culture be fostered. Students are required to uphold high standards of behavior and academic discipline while in the studio. See the full Studio Guidelines and Studio Culture Policy for more information.

### School Policy on Social Equity and Diversity

Our mission is to provide an environment where people can learn, teach and work with a shared sense of purpose, core values and respect without bias towards individual beliefs, values and areas of difference. We do this in an effort to create a community that respects and values the full and equal inclusion of its members. Our goal is to provide an environment that is welcoming and inclusive of all.

### **Universal Pedagogy**

Woodbury University is committed to making reasonable accommodations to assist individuals with disabilities in reaching their academic potential. Students desiring accommodations due to a physical, learning or psychological disability must first complete an Accommodations Request Form, which can be downloaded here, and found under "Academic Resources." Accommodations cannot be granted prior to the instructor's receipt of a Notification of Special Needs Release Form from the Disabilities Coordinator. Accommodations are never provided retroactively. (For more information, contact the Disabilities Coordinator (818) 394-3345.)

#### **Academic Honesty**

Students are responsible for familiarizing themselves with Woodbury's Student Code of Conduct, which can be found in the Catalog. Academic misconduct, dishonesty, plagiarism, and cheating will not be tolerated and may lead to failure of the course.

#### **Grade Requirements**

Refer to the Woodbury University catalog for grading standards and policies.

#### **Environmental Responsibility**

Studio projects shall be designed in a socially and environmentally responsible manner. All projects should reduce dependencies on non-renewable resources.

### **Class Attendance**

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### Excused Absence

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#### **Grievance Protocol**

Students should use the following protocol for questions, grievances, or general concerns about coursework and the studio environment. Health and safety concerns and emergencies should immediately be directed to campus security (818-252-5208). Academic concerns should be directed first to the student's instructor, and then to the studio coordinator as appropriate. If further consultation is required, the student is advised to meet with the Coordinator and/or the Chair (Marc Neveu, both Undergraduate and Graduate).

#### **Class Syllabus and Structure**

While every effort will be made to follow the outline of the published syllabus, course structure and calendar may be changed at the instructor or coordinator's discretion. Announcements will be made if such changes occur. Students who miss class are responsible for tracking any such announcements.

### Calculation Of Grade

Letter grades are converted to numeric values using the following values:

Letter	GPA	%	Definition
А	4.00-3.84	96-100	Student learning and accomplishment far exceeds published objectives for the course/test/assignment and student work is distinguished consistently by is high level of competency and/or innovation.
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B+	3.49-3.17	88-91	Student learning and accomplishment goes beyond what is expected in the published objectives for the course/test/assignment and student work is frequently characterized by its special depth of understanding, development, and/or innovative experimentation.
В	3.16-2.84	84-87	
B-	2.83-2.50	80-83	Students learning and accomplishment meets all published objectives for the course/test/assignment and the student work demonstrates the expected level of understanding, and application of concepts introduced.
C+	2.49-2.17	76-79	
С	2.16-1.84	72-75	
C-	1.83-1.50	68-71	Student learning and accomplishment based on the published objectives for the course/test/assignment were met with minimum
D+	1.49-1.17	64-67	passing achievement.
D	1.16-0.60	60-63	
F	0.00-0.60	< 60	Student learning and accomplishment based on the published objectives for the course/test/assignment were not sufficiently addressed nor met.

# Woodbury University School of Architecture Building 4: Environmental Systems Integration ARCH 547

Semester:Spring 2020Time:Tuesday/Friday 9:00-11:30 AMLocation:AL102Instructor(s):Linda TaalmanOffice hours:Monday 1-4pm

# **Catalog Description**

Credits 3.0. Students learn an integrated approach to managing structural and environmental performance and human comfort. The approach to ambient control includes active and passive options, vernacular models, and considerations of climate and materiality. Discussion integrates the functionality, phenomenological effect, and resource impact of system selection. Prerequisites: Building 3

# Learning Outcomes

Upon completion of this course, it is expected that students will be able to:

- Experiment with building composition, systems, and assemblies as a negotiation between human comfort, environmental positioning and resource management.
- Pursue basic building performance analysis through introductions to environmental responsive modeling
- Analyze and represent building performance using modeling and diagrams and industry standard integration representation
- Demonstrate an understanding of building envelope and material assemblies and their fundamental performance characteristics and environmental impact.
- Demonstrate an understanding of environmental design, including both passive and active systems.
- Demonstrate an understanding of building services including MEP, circulation systems, and life safety systems
- Demonstrate ability to design sites and buildings compliant with accessibility and life safety
- Demonstrate ability to produce technically clear drawings and construct models detailing the assemblage of materials, systems and articulate the specific components.

# NAAB Student Performance Criteria

### B.3: Codes and Regulations

Ability to design sites, facilities and systems consistent with the principles of life-safety standards, accessibility standards, and other codes and regulations.

# **B.4: Technical Documentation**

Ability to make technically clear drawings, prepare outline specifications, and construct models illustrating and identifying the assembly of materials, systems, and components appropriate for a building design.

# **B.6: Environmental Systems**

Understanding the principles of environmental systems' design, how systems can vary by geographic region, and the tools used for performance assessment. This must include active and passive heating and cooling, indoor air quality, solar systems, lighting systems, and acoustics.

# **B.7: Building Envelope Systems and Assemblies**

Understanding of the basic principles involved in the appropriate selection and application of building envelope systems relative to fundamental performance, aesthetics, moisture transfer, durability, and energy and material resources.

# **B.8: Building Materials and Assemblies**

Understanding of the basic principles utilized in the appropriate selection of interior and exterior construction materials, finishes, products, components and assemblies based on their inherent performance including environmental impact and reuse.

### **B.9: Building Service Systems**

Understanding of the basic principles and appropriate application and performance of building service systems including mechanical, plumbing, electrical, communication, vertical transportation, security and fire protection systems

# **B.10: Financial Considerations**

Understanding of the fundamentals of building costs, which must include project financing methods and feasibility, construction cost estimating, construction scheduling, operational costs, and life-cycle costs.

### **Course Description**

The course explores the interrelationships of the properties of passive design, materials, environmental systems, building envelope systems, and construction technology as they influence design-development and decision making in the design of the total building. A comprehensive and integrative process is presented.

Instructional Process Lectures, reading assignments and class discussion Analytical and generative modeling assignments Critique of student presentations- graphic, verbal and written material

# Schedule and Deliverables

Week 1: Introduction

Week 2-5: Assignment A-C (11x17) February 11: Presentation A-C Week 6-8: Assignment D-E (11x17) March 7: Midterm Presentation

Week 9-13: Assignment F-H (11x17) April 14- Final Presentation of A-H

May 1- Integrated Presentation with ARCH 589 Final

# **Final Grade Calculation**

10%- Assignment A- Building Material and Assembly
10%- Assignment B- Building Envelope
10%- Assignment C- Environment 1: Passive Environmental Systems
10%- Assignment D- Environment 2: Active Environmental Systems
10%- Assignment E- Building Service Systems: Water and Power
10%- Assignment F- Site Analysis, Massing and Orientation in Response to Site
10%- Assignment G- Larger Building Service Systems: Circulation, MEP, AV/Security
10%- Assignment H- Outline Specification, Construction and Building Details
10%- Attendance and Participation
10%- Final Presentation

Students will be asked to apply the principals learned through analysis and design in 8 assignments developing the students' design projects in the Total Building Studio. Assignments will utilize the model and diagram as the key tools for analysis, design, representation and communication of building systems. The assignments aim to analyze and design the systems as a series of discrete systems that work together to serve a holistic design.

Assignments A-C will develop material and envelope research and design and establish the passive design of environmental systems.

Assignments D-E will develop the active environmental systems and essential water and power systems

Assignments F-H will develop the site-specific relationships using the selected systems and develop the design for specific sites and further develop the larger networked systems and building details.

Students are expected to demonstrate their understanding of the systems through each assignment. Assignment A-H will be subdivided into weekly assignments with value distributed equally between the parts, drafts of each weekly assignment are due each week, the midterm and final presentations will compile the work completed from weekly assignments. The final presentation of the Total Building will include an integrated presentation of the work from A-H from this course.

Criteria for Evaluation

Each Assignment will be evaluated for its

- 1. Analysis and Design clarity of systems
- 2. Articulation of detail, reference, description and justification of each system selection
- 3. Development of clear concepts that negotiate design and integration of building systems

Each Assignment will also be evaluated for the following specific criteria Assignment A- Building Material and Assembly (NAAB B-8) Assignment B- Building Envelope (NAAB B-7) Assignment C- Environment 1: Passive Environmental Systems (NAAB B-6) Assignment D- Environment 2: Active Environmental Systems (NAAB B-6) Assignment E- Building Service Systems: Water and Power NAAB B-6 and B-9) Assignment F- Site Analysis, Massing and Orientation in Response to Site (NAAB B-6 and B-7) Assignment G- Larger Building Service Systems: Circulation, MEP, AV/Security (NAAB B-3 and B-9) Assignment H- Outline Specification, Construction and Building Details (NAAB B-4 and B-10)

# Estimate of Costs

Students should expect to expend the necessary resources to produce drafts and final for each assignment. Printing costs are depending upon current pricing and plotting costs established by the university (please see labs) and specific design solutions and material requirements for modeling materials.

### **Attendance Policy**

Students are expected to attend each session of class to not miss key lectures, discussions and feedback. Review of assignments, presentations and critique will be presented during class time. It is not possible to make up missed lectures, discussion or critique. If a presentation is missed the material intended to be presented on that date must be submitted complete to moodle and physically presented at the next class session.

### **Moodle Policy**

Readings and assignments will be posted to moodle. Students are expected to download materials from moodle and be familiar with the material and prepared to discuss these materials in class. Students are responsible for posting all assignments by the assignment due date.

### DEPARTMENT POLICIES AND PROCEDURES

#### **Requirements for Documentation and Archiving**

Every student is responsible for digitally archiving their work. An assignment that has not been digitally archived will be considered incomplete and will not receive credit. Please use the process provided by your instructor to produce a single PDF document for each assignment. Failure to submit the required documentation in usable format may result in a grade reduction in the final grade of the semester. Documentation of the studio work is essential for the NAAB accreditation process and assessment of the architecture program.

The university reserves the right to retain student work for archival purposes. Projects/models, assignments, and exams will be kept at the department's discretion for this purpose. Students will be asked to help with archiving their projects at the end of the semester.

#### Writing Requirements

All written work must meet the standards for English. Poorly written papers may be returned without a grade for revision and resubmission, and may be subject to grade reduction. Students are encouraged to utilize the Woodbury Writing Center.

#### **Studio Culture**

The studio environment is an essential component in learning to become an architect. One goal of the School of Architecture is to create a vibrant, exploratory, safe and respectful learning culture for students. Only through respect between faculty and students, as well as students among themselves, can a healthy educational studio culture be fostered. Students are required to uphold high standards of behavior and academic discipline while in the studio. See the full Studio Guidelines and Studio Culture Policy for more information.

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#### Accommodations for students with identified disabilities

Woodbury University is committed to making reasonable accommodations to assist individuals with disabilities in reaching their academic potential. Students desiring accommodations due to a physical, learning or psychological disability must first complete an Accommodations Request Form, which can be downloaded from http://go.woodbury.edu, and found under "Academic Resources." Accommodations cannot be granted prior to the instructor's receipt of a Notification of Special Needs Release Form from the Disabilities Coordinator. Accommodations are never provided retroactively. (For more information, contact the Disabilities Coordinator in the Whitten Center (818) 394-3345.)

#### Academic Honesty

Because the integrity of the academic enterprise of any institution of higher education requires honesty in scholarship and research, academic honesty is required at Woodbury University. Academic integrity is important for two reasons: first, independent and original scholarship ensures that students and scholars derive the most from their educational experience and the pursuit of knowledge. Second, academic dishonesty violates the most fundamental values of a community of scholars and depreciates the achievements of the entire University community. Accordingly, Woodbury University views academic dishonesty as one of the most serious offenses that a member of our community can commit. Adherence to the Academic Honesty Policy reflects the commitment of our community to the ideals of learning, research, and scholarship. See Catalog for the entire Academic Honesty Policy.

#### Grade Requirements

Refer to the Woodbury University catalog for grading standards and policies.

#### **Environmental Responsibility**

Studio projects shall be designed in a socially and environmentally responsible manner. All projects should reduce dependencies on non-renewable resources.

#### **Class Attendance**

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#### Email

Students are advised to meet with their instructors during posted office hours. Face-to-face communication in discussing and resolving problems is preferable to email exchanges. Additionally, meetings must be scheduled in advance using email correspondence. Email correspondence must be written in a respectful and professional manner. It is the student's responsibility to consistently check for email.

#### **Grievance Protocol**

Students should use the following protocol for questions, grievances, or general concerns about coursework and the studio environment. Health and safety concerns and emergencies should immediately be directed to campus security (818-252-5208). Academic concerns should be directed first to the student's instructor, and then to the studio coordinator as appropriate. If further consultation is required, the student is advised to meet with the Coordinator and/or the Department Chair.

#### **Class Syllabus and Structure**

While every effort will be made to follow the outline of the published syllabus, course structure and calendar may be changed at the instructor or coordinator's discretion. Announcements will be made if such changes occur. Students who miss class are responsible for tracking any such announcements.

### Calculation Of Grade

Letter grades are converted to numeric values using the following values:

Letter	GPA	%	Definition
А	4.00-3.84	96-100	Student learning and accomplishment far exceeds published objectives for the course/test/assignment and student work is distinguished consistently by is high level of competency and/or innovation.
A-	3.83-3.50	92-95	
B+	3.49-3.17	88-91	Student learning and accomplishment goes beyond what is expected in the published objectives for the course/test/assignment and student
В	3.16-2.84	84-87	work is frequently characterized by its special depth of understanding, development, and/or innovative experimentation.
B-	2.83-2.50	80-83	Students learning and accomplishment meets all published objectives for the course/test/assignment and the student work demonstrates the expected level of understanding, and application of concepts introduced.
C+	2.49-2.17	76-79	
С	2.16-1.84	72-75	
C-	1.83-1.50	68-71	Student learning and accomplishment based on the published objectives for the course/test/assignment were met with minimum
D+	1.49-1.17	64-67	passing achievement.
D	1.16-0.60	60-63	
F	0.00-0.60	< 60	Student learning and accomplishment based on the published objectives for the course/test/assignment were not sufficiently addressed nor met.

Woodbury University School of Architecture Grad Studio 3 : ReForm: A New Civics Institute ARCH 587

- Semester: Fall 2020
- Time: Tuesday / Friday 1:00-6:00
- Location: Online
- Instructors: Cody Miner
- Office Hours: Upon Request



The Parker Center on April 29, 1992, after the jury's decision in the Rodney King case.

### **Course Description**

Architecture in its disciplinary form has expressed a desire to continue the project of autonomy, that being a project unencumbered by circumstance. But architecture never operates purely in a vacuum, forces cultural and political, influence the world in which it operates and also amends its ontological shape and sensibilities. This allows for the architectural project to maintain its relevance while exploring new territories in values, all of which should be enticing to the architect.

Our project for the semester will focus on a historically loaded site in Downtown Los Angeles, formally known as the Parker Center, home to the LAPD from 1950-2009 and also used as a symbolic prop for the police in its Hollywood representation. With it recent demolition, the site had a vision within a larger master plan of a civic center office tower housing government workers. This vision met its demise as it was plagued with internal corruption with city council, a sketchy financial backing, and a climate fraught for change. Our goal will be to rescue the site from its toxic history new and old and return it back to the people in way of a Cultural Development Center & Civics Academy. A new utopian style typology, the Civics Academy will act as an institutional campus style program, built to enhance its citizens with knowledge of their rights and the functions of government.

Within our exploration of the new Civics Academy we will pursue several factors engaged within a comprehensive project including ground, mass, tectonics, façade articulation, interiority, and infrastructure, all while negotiating issues of context, or what does it mean for the project to be

contextual. Ideas and the default form of contextualism rely heavily on the replications and reproduction of its preconceived urban existence. In a way, what will be should culminate in what already exists. This type of developer friendly notion to contextualism ignores the process of reformation. Investigations in existing facades and form while be our drivers in expressing novelty and interaction with the city. Our new proposals will have to jostle, lift and reposition in order to allow itself situated amongst its predisposed ground and proximities.

Lastly the studio will focus on the types of people or personalities that will inhabit the projects. Usually architectural renderings are filled with generic silhouettes with grey fill, expressing no personality. Each student will explore the making of their own entourage and individual personalities in order to answer the question: Who will inhabit this project?

### **Catalog Description**

Systemic understanding of architecture is broadened through examination of the architectural object as a microcosm of an ever-expanding context, of a community or city as recycled. Building is introduced as infrastructure and infrastructure as intervention within ecology, land-and urban-scape, site and territory. Studio, twelve hours per week. Prerequisite: ARCH 584, Graduate Studio 2 or advanced placement.

Six Unit Studio.

### Learning Outcomes

Minimum to NAAB Criteria:

PC.2: Design: How the program instills in students the role of the design process in shaping the built environment and conveys the methods by which design processes integrate multiple factors, in different settings and scales of development, from buildings to cities.

Learning Outcome: Identify, catalog, and respond to an urban context and site conditions.

PC.3 Ecological Knowledge and Responsibility: How the program instills in students a holistic understanding of the dynamic between built and natural environments, enabling future architects to mitigate climate change responsibly by leveraging ecological, advanced building performance, adaptation, and resilience principles in their work and advocacy activities.

Learning Outcome: Understanding the impact of urban and site development on climate justice.

PC.7: Learning and Teaching Culture: How the program fosters and ensures a positive and respectful environment that encourages optimism, respect, sharing, engagement, and innovation among its faculty, students, administration, and staff.

Learning Outcome: Present, discuss, and debate work in a public forum.

SC.3 Regulatory Context: How the program ensures that students understand the fundamental principles of life safety, land use, and current laws and regulations that apply to buildings and sites in the United States, and the evaluative process architects use to comply with those laws and regulations as part of a project.

Learning Outcome: Cite and diagram codes, regulations, and evaluative processes that address zoning in buildings and on sites.

SC.5 Design Synthesis: How the program ensures that students develop the ability to make design decisions within architectural projects while demonstrating synthesis of user

requirements, regulatory requirements, site conditions, and accessible design, and consideration of the measurable environmental impacts of their design decisions.

Learning Outcome: Design buildings and sites within the regulatory framework that governs zoning.

# Student Learning Objectives:

<u>Positions</u>. Students will advance their skills to formulate a clear disciplinary position supported by relevant texts and historic and contemporary precedents, and incorporate that position into advanced representations of a building proposal.

<u>Precedents</u>. Advance the skills to research, examine and comprehend specific design principles present in relevant historic and contemporary precedents, and to make choices regarding the incorporation of those principles into a building proposal.

<u>Integrated Design</u>. Develop the skills to work independently and successfully design an integrative building project.

<u>Professional Communication.</u> Students will advance skills in the professional communication of architectural concepts using the mediums of drawing and modeling and verbal and written presentation.

<u>Techniques.</u> Students will advance technical skills regarding modeling, drawing, and representation.

### Schedule and Deliverables

Week 1 08/25: Syllabus, Intro, Ex 1 Site & Precedent 08/28 : Working Session

Week 2 09/01: Ex 1 due, Ex 2 Context Façade Study 09/04: Working Session

Week 3 09/08 : Ex 2 due, Ex 3 Context Volume 09/11 : Working Session

Week 4 09/15 : Ex 3 due, Ex 4 Stack Slice 09/18: On site

Week 5 09/22 : Ex 4 due, Ex 5 Planametric Wrap 09/25 : On site / Ground

*Week* 6 09/29 : 1st *REVIEW* 10/02 : Working Session

Week 7 10/06 : NO CLASS 10/09 : Working Session Week 8 10/13 : Working Session 10/16 : *Mid Review* 

Week 9 10/20 : Interiority 10/23 : Working Session

Week 10 10/27: Working Session 10/30 : Working Session

Week 11 11/03: Articulation 11/06 : Working Session

Week 12 11/10 : Working Session 11/13 : Representation / Entourage

*Week 13* 11/17: Working Session 11/20: Working Session

Week 14 11/24 : Pinup 11/27 : NO CLASS

Week 15 12/01 : Pinup Final TBD

# Final Grade Calculation

Attendance/Participation/Assignments: 20% Midreview: 30 Final Review: 50%

# Assignments, Assessment and Readings

Assignments will be dispersed throughout the course, each given with their means of evaluation and assessment. Overall, each assignment will be graded upon the method, professionalism, and overall craft digitally or manually. Readings will be posted to Moodle in order for class discussion, please be sure to check Moodle frequently for any readings posted for that week.

# Estimate of Costs

Model making materials such as an Olfa, cutting mat, and foam core will be used for small models throughout this semester. Products can be purchased at your local arts and crafts store, or online at Blick.com or Amazon. Also, some printing costs may occur with model making techniques.

### Attendance Policy

Attendance during scheduled meeting times is required, and participation in the discussion and review session is a major part of the grade. If a student plans to miss a class, please notify the instructor beforehand with a written excuse. If attendance and work production fall behind during the semester, the student will be notified of failure in the course.

### Submitting Late Work

Students who submit work late to Moodle or pin up work late in Concept Board will have their grade directly affected depending on the lateness of submission. So turn in work on time!

# Moodle Policy

Assignments, reading materials and material submission will take place on Moodle. Please get yourself acclimated and comfortable with Moodle, as it will be our way of submitting work to be graded. Reviews and pinups will be viewed in Concept Board, a link will be supplied using Moodle.

# Web Cam Usage

During class meetings, students are required to turn on their video cameras and microphones. If you are uncomfortable doing so, please reach out ton instructor to discuss. While in class sessions, please dress appropriately, and attempt to be in a private space, movement and distractions in the background tend to create a disruptive environment.

### DEPARTMENT POLICIES AND PROCEDURES

Requirements for Documentation and Archiving Each student must submit documentation of the full semester's work at the end of each term, in pdf format. Materials should include research, writing, and design work, including important study models and sketches. Studio faculty will further define how this work should be organized and presented before the end of the semester. Failure to submit the required documentation in usable format may result in a grade reduction in the final grade of the semester. Documentation of the studio work is essential for the NAAB accreditation process and assessment of the architecture program.

The university reserves the right to retain student work for archival purposes. Projects/models, assignments, and exams will be kept at the department's discretion for this purpose. Students will be asked to help with archiving their projects at the end of the semester.

### Writing Requirements

All written work must meet the standards for English. Poorly written papers may be returned without a grade for revision and resubmission, and may be subject to grade reduction. Students are encouraged to utilize the Woodbury Writing Center. Link is <u>here</u>.

### **Studio Culture**

The studio environment is an essential component in learning to become an architect. One goal of the School of Architecture is to create a vibrant, exploratory, safe and respectful learning culture for students. Only through respect between faculty and students, as well as students among themselves, can a healthy educational studio culture be fostered. Students are required to uphold high standards of behavior and academic discipline while in the studio. See the full Studio Guidelines and Studio Culture Policy for more information.

### School Policy on Social Equity and Diversity

Our mission is to provide an environment where people can learn, teach and work with a shared sense of purpose, core values and respect without bias towards individual beliefs, values and areas of difference. We do this in an effort to create a community that respects and values the full and equal inclusion of its members. Our goal is to provide an environment that is welcoming and inclusive of all.

### Universal Pedagogy

Woodbury University is committed to making reasonable accommodations to assist individuals with disabilities in reaching their academic potential. Students desiring accommodations due to a physical, learning or psychological disability must first complete an Accommodations Request Form, which can be downloaded from http://go.woodbury.edu, and found under "Academic Resources." Accommodations cannot be granted prior to the instructor's receipt of a Notification of Academic Accommodation Plan (NAAP) from the Disabilities Coordinator. Accommodations are never provided retroactively. (For more information, contact the Disabilities Coordinator in the Whitten Center (818) 394-3345.)

#### **Academic Honesty**

Academic integrity is important for two reasons: first, independent and original scholarship ensures that students and scholars derive the most from their educational experience and the pursuit of knowledge. Second, academic dishonesty violates the most fundamental values of a community of scholars and depreciates the achievements of the entire University community. Accordingly, Woodbury University views academic dishonesty as one of the most serious offenses that a member of our community can commit. Adherence to the Academic Honesty Policy reflects the commitment of our community to the ideals of learning, research, and scholarship. See Catalog for the entire Academic Honesty Policy.

#### **Grade Requirements**

Refer to the Woodbury University catalog for grading standards and policies.

### **Environmental Responsibility**

Studio projects shall be designed in a socially and environmentally responsible manner. All projects should reduce dependencies on non-renewable resources.

### **Class Attendance**

It is mandatory that students take advantage of all scheduled course time. Regular attendance at EVERY class is expected throughout the duration of the class/studio time. Arrival at the beginning of the class period is required. Lateness or early departure will be considered as an absence. 'Regular and prompt attendance at all university classes is required. The instructor is not obligated to assign extra work or to prepare additional examinations for classes missed. It is understood that when 15% of the class time has been missed, the student's absence rate is excessive. Each instructor will announce his/her attendance policy in the course syllabus.

### **Excused Absence**

Students should report any illness or emergency to their course instructor, preferably before missing the class, by emailing the instructor. Medical reasons for absences can alternatively be shared with the school nurse and/or the coordinator for the ODAS (disabilities office) who will notify instructor of receipt without revealing specific information.

Students who anticipate absence due to religious observance or similar commitments should speak with their instructor at the start of the term to review all dates in question and develop a plan to meet all course requirements.

#### Email

Students are advised to meet with their instructors during posted office hours. Face-to-face communication in discussing and resolving problems is preferable to email exchanges. Additionally, meetings must be scheduled in advance using email correspondence. Email correspondence must be written in a respectful and professional manner. It is the student's responsibility to consistently check for email. students should use their official woodbury.edu email account.

Due to confidentiality and FERPA requirements all faculty, staff and students, when corresponding through email, must use their university provided Woodbury.edu email accounts. Students are encouraged to check this email address regularly as it is the only email address in which they will receive official course or university information.

### **Grievance Protocol**

Students should use the following protocol for questions, grievances, or general concerns about coursework and the studio environment. Health and safety concerns and emergencies should immediately be directed to campus security (818-252-5208). Academic concerns should be directed first to the student's instructor, and then to the

studio coordinator as appropriate. If further consultation is required, the student is advised to meet with the Coordinator and/or the Chair (Marc Neveu, both Undergraduate and Graduate).

#### **Class Syllabus and Structure**

While every effort will be made to follow the outline of the published syllabus, course structure and calendar may be changed at the instructor or coordinator's discretion. Announcements will be made if such changes occur. Students who miss class are responsible for tracking any such announcements.

### ONLINE COURSE DELIVERY POLICIES AND GUIDELINES

#### Formats of delivery:

**Synchronous online:** All instruction is provided via the Internet and no face-to-face instruction is required. Faculty and learners meet for regularly scheduled class sessions.

Synchronous activities provide real-time dialogue that can provide the human interaction that is needed among our Woodbury student population.

**asynchronous online**: All instruction is provided via the Internet and no face-to-face instruction is required. Faculty and learners do not meet for regularly scheduled class sessions.

Asynchronous activities allow students with the flexibility to complete certain course work at their own pace, within reason. It also allows students time to think, write, and reflect.

**hybrid with synchronous online:** An instructional delivery method which combines the traditional delivery and the synchronous distance delivery formats.

**hybrid with asynchronous online:** An instructional delivery method which combines the traditional delivery and the synchronous_distance delivery formats.

traditional: This delivery method allows learners and faculty to meet in person or as a group for regularly scheduled class sessions either on campus or at another physical location.

#### Type of course:

Lecture: Refers to the first or primary organization of non-lab class instruction, e.g., a lecture where instructor-based material is presented, or a seminar where material is analyzed and discussed by both students and instructor. Also includes case studies and team-based learning situations. Class meeting time equals 50 minutes per unit per week.

Studio: Refers to situations where the student is engaged in the practice and use of techniques for productions in the areas of architecture, interior design, graphic design, and other design forms. This instruction is used to further advance student's skills in their field of design. The instructor role varies from direct assistance to simple availability for questions and supervision. Class meeting time equals 100 minutes per unit per week.

Laboratory: Refers to the first organization of laboratory class instruction unless one of the other classifications above is more appropriate. Includes both group instruction and individualized instruction such as biology and physics lessons, supervised computing exercises, and hands-on

activities. Class meeting time equals 50 minutes per unit per week.

### Length of sessions:

16-week (Fall/Spring) 7-week intensive format (Fall/Spring) 5-week intensive format (Fall/Spring) 10-week (Summer) 6-week (Summer Super Sessions)

### **Online / Hybrid Requirements**

Students must have basic computer skills, including the use of word processing software, email, and the ability to use internet browsers, such as Safari, Firefox, or Chrome.

All communication by email will be using the assigned woodbury.edu address. Students are required to access this email account on a daily base to ensure timely communication.

Woodbury University's Learning Management System (LMS) of record is Moodle. Moodle should be used to provide students information they need to plan, prepare, and learn in the course. This information includes, but is not limited to: (a) your course syllabus; (b) assignment due dates, instructions, and grading rubrics; (c) course schedule; (d) additional course materials and links, etc.; and/or (e) exams.

Students are responsible for meeting the technical requirements of <u>Moodle</u> and <u>RingCentral</u> and to familiarize themselves with the Moodle Learning Management System and RingCentral Communications System.

IT provides a Moodle (and RingCentral for online delivery) orientation "course" visible to students enrolled in all courses. Students unfamiliar with Moodle are required to review or consult it as needed. This ensures class time is dedicated to course content and not technical tutorials. The syllabus should also indicate how IT will support students' online technical needs.

All required materials, including readings, videos, lectures will be posted on and can be accessed through Moodle.

All assignments have to be submitted through Moodle or <u>OneDrive</u>, depending on file size and faculty instructions.

Exams and quizzes will be administered through either Moodle or <u>Proctorio</u>. Students are required to install the Proctorio Extension in advance.

### Attendance policy

Regular and prompt attendance at all University classes is required. It is the responsibility of the student to adhere to class/studio participation expectations. The instructor is not obligated to assign extra work or to prepare additional content for material missed. It is understood that when 15% of the class time has been missed, the student's absence rate is excessive. The interpretation of this participation policy is left to the discretion of individual faculty.

Attendance of synchronous classes will be measured through attendance of the RingCentral meetings. Students are required to have their camera turned on for the entire class session to be counted as present. If technical or privacy issues prevent the student from having the camera turned on, then the student must contact the Office of Student Affairs and apply for an exemption. Students must complete an Accommodations Request Form, which can be downloaded from http://go.woodbury.edu, and found under "Academic Resources." Accommodations cannot be granted prior to the instructor's receipt of a Notification of Special Needs Release Form from the Disabilities Coordinator. Accommodations are never provided retroactively.

Attendance of asynchronous classes will be measured through the last access to the course in Moodle, participation in quizzes and online discussions, as well as submitted assignments by the required day and time.

### Protecting Privacy and Data During Remote Instruction

This class is being conducted over Ring Central and Moodle. As the host, the instructor may be recording the sessions. The recording feature for others is disabled so that no one else will be able to record the sessions. No recording by other means is permitted. The sessions will be posted on the Moodle class website unless otherwise notified. In case of privacy concerns and individual students wanting not to appear in the recording, the student must contact the Office of Student Affairs and apply for an exemption. Students must complete an Accommodations Request Form, which can be downloaded from http://go.woodbury.edu, and found under "Academic Resources." Accommodations cannot be granted prior to the instructor's receipt of a Notification of Special Needs Release Form from the Disabilities Coordinator. Accommodations are never provided retroactively. If the student prefers to use a pseudonym instead of the real name, please let the instructor know what name will be used so that the instructor knows who you the student is during the session.

Pursuant to the terms of the agreement between the vendors (Moodle and RingCentral) and Woodbury University, the data is used solely for this purpose and the vendor is prohibited from re-disclosing this information. Woodbury University also does not use the data for any other purpose. Recordings will be deleted when no longer necessary. However, the recording may become part of an administrative disciplinary record if misconduct occurs during a video conference.

# Calculation Of Grade

Letter grades are converted to numeric values using the following values:

Letter	GPA	%	Definition
А	4.00-3.84	96-100	Student learning and accomplishment far exceeds published objectives for the course/test/assignment and student work is distinguished consistently by is high level of competency and/or innovation.
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B+	3.49-3.17	88-91	Student learning and accomplishment goes beyond what is expected in the published objectives for the course/test/assignment and student work is frequently characterized by its special depth of understanding, development, and/or innovative experimentation.
В	3.16-2.84	84-87	
В-	2.83-2.50	80-83	Students learning and accomplishment meets all published objectives for the course/test/assignment and the student work demonstrates the expected level of understanding, and application of concepts introduced.
C+	2.49-2.17	76-79	
С	2.16-1.84	72-75	
C-	1.83-1.50	68-71	Student learning and accomplishment based on the published objectives for the course/test/assignment were met with minimum
D+	1.49-1.17	64-67	passing achievement.
D	1.16-0.60	60-63	
F	0.00-0.60	< 60	Student learning and accomplishment based on the published objectives for the course/test/assignment were not sufficiently addressed nor met.

# Syllabi B.3 Sustainability (M. Arch)
# Woodbury University School of Architecture Graduate Design Studio 4: The Total Building ARCH 589

Semester:Spring 2020Time:Tuesday/Friday 1:15-6:15 PMLocation:TBDInstructor(s):Linda TaalmanOffice Hours:Monday 1-4pm

### **Catalog Description**

Credits 6.00. Students are challenged to synthesize architectural considerations, from the conceptual to the tangible, in the comprehensive design of a building. The studio project grows from a strong theoretical base into a response to the complexities of program and site. Accessibility, environmental performance, and life safety are addressed. Emphasis is placed on the integration of building systems with envelope and structure. Material selection is guided by both climate and context and is sensitive to resource conservation. Prerequisites: Graduate Studio 3

### Learning Outcomes

Upon completion of this course, it is expected that students will be able to:

- Develop a comprehensive design proposal, integrating clear formal and spatial architectural solutions that respond to site and climate, accessibility, and present a fully integrated approach to systems
- Emphasize the design of an architecture through assemblies of materials and systems
- Make connections between building composition, assembly, manufacturing, fabrication and representation
- Design a construct fully articulate of human activity and code compliance, of component parts and whole, and human control and resource management
- Integrate the multitude of systems into the proposed architecture required today to create sustainable building solutions

### NAAB Student Performance Criteria

### A.4 Architectural Design Skills

Ability to effectively use basic formal, organizational and environmental principles and the capacity of each to inform two- and three-dimensional design.

### A.5 Ordering Systems

Ability to apply the fundamentals of both natural and formal ordering systems and the capacity of each to inform two- and three-dimensional design.

### **B.2 Site Design**

Ability to respond to site characteristics including urban context and developmental patterning, historical fabric, soil, topography, climate, building orientation, and watershed in the development of a project design.

#### **B.3 Codes and Regulations**

Ability to design sites, facilities and systems consistent with the principles of lifesafety standards, accessibility standards, and other codes and regulations.

### **B.4 Technical Documentation**

Ability to make technically clear drawings, prepare outline specifications, and construct models illustrating and identifying the assembly of materials, systems, and components appropriate for a building design.

### **B.6 Environmental Systems**

Understanding the principles of environmental systems' design, how systems can vary by geographic region, and the tools used for performance assessment. This must include active and passive heating and cooling, indoor air quality, solar systems, lighting systems, and acoustics.

### **B.7 Building Envelope Systems and Assemblies**

Understanding of the basic principles involved in the appropriate selection and application of building envelope systems relative to fundamental performance, aesthetics, moisture transfer, durability, and energy and material resources.

### **B.8 Building Materials and Assemblies**

Understanding of the basic principles utilized in the appropriate selection of interior and exterior construction materials, finishes, products, components and assemblies based on their inherent performance including environmental impact and reuse.

### **B.9 Building Service Systems**

Understanding of the basic principles and appropriate application and performance of building service systems including mechanical, plumbing, electrical, communication, vertical transportation security, and fire protection systems.

#### **B.10 Financial Considerations**

Understanding of the fundamentals of building costs, which must include project financing methods and feasibility, construction cost estimating, construction scheduling, operational costs, and life-cycle costs.

#### C.2 Integrative Evaluation and Decision-Making Design Process

Ability to demonstrate the skills associated with making integrated decisions across multiple systems and variables in the completion of a design project. This demonstration includes problem identification, setting evaluative criteria, analyzing solutions, and predicting the effectiveness of implementation.

#### C.3 Integrative Design

Ability to make design decisions within a complex architectural project while demonstrating broad integration and consideration of environmental stewardship, technical documentation, accessibility, site conditions, life safety, environmental systems, structural systems, and building envelope systems and assemblies.

### **Course Description**

**HOME NOW**: The 2020 Comprehensive design studio takes on several specific challenges facing us now, the greatest being climate change and the impact that buildings have on their environment and the housing crisis and the ability for architects to provide solutions for the 100% not the 1%. Within this context, the comprehensive studio places particular emphasis on how to design and integrate technology and building systems within our building envelope, with the goal of creating spaces that are highly tuned to their climate, context and social needs. We will question the idea of home and domestic space and redefine how our individual spaces can make a positive impact on our shared communities.

2020 is the year that California implements the first net zero energy code requirement at the residential scale, with the plan that by 2030 all buildings in California will be net zero. What this means is that our living spaces, many of which are planned piece by piece by the individual inhabitant, will lead the way towards a sustainable architecture that integrates energy performance with envelope efficiency at the highest level. Dwelling spaces have always played a critical role in the history of architecture, and particularly in California, with architects pioneering new technologies, materials and systems through the most essential space of the home. We will question both the idea of home and the role technology can play in defining how we live and how we build our spaces.

2020 is also a time of crisis for housing globally, and locally within the context of California which is facing a staggering number of homeless and a total lack of affordable housing at the rural, suburban and urban scale. We need fresh solutions. How can architects be a part of the future solutions for our residential spaces at all scales? We will rethink the idea of the house from the inhabitants needs as a 21st century citizen, what is the purpose of our home today? What is the definition of family, neighborhood, community? How do we want to live in the future?

#### Micro-housing

We will use the micro unit as a catalyst for big change. Starting with a single unit and the scale of the inhabitant the studio will innovate solutions for living, energy usage and generation, and material and resource management. The unit will then be tested at a variety of scales- the rural, the suburban and the urban- and combinations- the single unit, the double and the multi.

#### Material Research and Prefabrication/Construction

Materials and methods of construction will be questioned as we strive to present new environmental responsible and economical solutions for making space. One of the biggest inhibitors to housing is cost, and this studio strives to provide detailed solutions that are mindful of their environmental and economic feasibility. The studio will research methods of prefabrication, off site fabrication, and construction as a part of this questioning.

As part of the studio rubric we will take on the ACSA 2020 Housing Competition HERE & NOW: A House for the 21st Century. And students will be expected to submit their projects to the competition at the end of the semester.

The studio explores the potential for architects to innovate within a highly defined building envelope. Students will develop designs for micro housing within the context of the Los Angeles region. The studio encourages architecture that retains its own identity while integrating and filtering its environment. There will be an integral focus on passive design and the interface between construction systems developed and environmental systems required for the functionality of the program and achieving net zero energy. Through the course of the semester, the students will develop the projects through a rigorous methodology of drawings, diagramming and modelling arriving at a highly detailed comprehensive building.

### Schedule and Deliverables

Part 1: Design and Material Research for a Micro Unit: Historical Precedents, Material Research and Defining the Home Space- due January 28 Part 2: Concept Design for a Prefabricated Micro Unit- due February 11 Part 3: Building Systems Design – due March 7 Part 4: Building Development and Site Integration: Case studies for implementing design and selected systems and materials- due May 1

Assignments and Schedule subject to change or modification throughout the semester. Lectures, guests and field trips will be announced.

### Final Grade Calculation

15%- Part 1: Design and Material Research
15%- Part 2: Concept Design
20%- Part 3: Building Systems Design (Midterm Presentation)
30%- Part 4: Building Development and Site Integration
10%- Final Presentation
10%- Attendance and Participation

### Assignments and Assessment

Students will work through a combination of research & development and design in order to develop highly detailed and inventive building systems with a particular focus on innovative building envelope systems. Students will deploy these systems at a series of scales from small to large. Students will develop detailed drawings and models that they will prototype in digital models, 3d prints and detailed physical models.

Assignments will follow through 4 phases, Research & Development, Concept Design, Systems Design and Building Development and Site Integration. Weekly updates and sub assignments will be given. Students will work primarily as individuals; research may be done in groups.

### Criteria for Evaluation

Each Assignment will be evaluated for two core criteria and specific criteria noted below for each part 1. Clarity in Representation

2. Conceptual Rigor and Development

### Part 1: DESIGN AND MATERIAL RESEARCH due January 28

Activities and Processes: Research of Precedents, Material Research and Defining the Home space through documentation, catalog and interpretation, drawing and digital modeling.

- Students will research the studio topic through a multiprong interpretive lens, critical analysis of precedents, material research, and programmatic research
- This assignment consists of 3 key parts
  - 1.1. Precedent Research
  - 1.2. Material Research
  - 1.3. Programmatic Research
- Assessment/grading criteria used to generate grading rubrics.

Criteria below will be used in a matrix that is aligned with each sub assignment

- Precedent Research, Documentation and Interpretation
- Material Research (NAAB B.8)
- Programmatic Research (NAAB C.2)

### Part 2: CONCEPT DESIGN due February 11

Activities and Processes: Development of Concept Design through physical and digital modeling, drawing both orthographic and axonometric, and 3d visualization.

- Students will conceptually develop their material and program research through the development of the envelope into a unit that integrates concepts for passive design This assignment consists of 2 key parts
  - 2.1. Conceptual development of program as a 3-dimensional space integrating the human scale

2.2. Conceptual envelope design and passive design strategies (daylighting, shading, heat gain, natural ventilation)

Assessment/grading criteria used to generate grading rubrics.

Criteria below will be used in a matrix that is aligned with each sub assignment

- Develops clear Conceptual strategies in response to material and programmatic research (NAAB, A.5)
- Conceptual Building Envelope responds appropriately to design criteria, develops clear passive design strategies for massing and orientation (NAAB B.6, B.7)
- Integrative design approach- integration of multiple strategies in the creation of a holistic design (NAAB C.3)

### Part 3: SYSTEMS DESIGN due March 6

Activities and Processes: Development of Systems Design through physical and digital modeling, drawing both orthographic and axonometric, amd 3d visualization

 Students will develop their project with consideration primary active systems required for maintaining comfort and performance and balancing energy loads- active system and primary building service systems. The physical integration of these systems within the building envelope is the main objective.

This assignment consists of 2 key parts

3.1. Integration of Active Systems for environmental control (heating, cooling, ventilation, lighting)

3.2. Integration of Building Service Systems (energy systems, mechanical, electrical, plumbing, life safety, AV/Security)

Assessment/grading criteria used to generate grading rubrics.

Criteria below will be used in a matrix that is aligned with each sub assignment

- 1) Develops strategies for integrating active systems for environmental control with the conceptual design (NAAB B.6)
- 2) Develops the project through a clear systems design that successfully integrates the primary building service systems with the conceptual building envelope (NAAB B.7, B.9)
- 3) Clear integrative approach and design decision making (NAAB C.2)
- 4) Integrative design approach- integration of multiple strategies in the creation of a holistic design (NAAB C.3)

### Part 4: BUILDING AND SITE DESIGN due April 14

Activities and Processes: Development of Building Design through drawing both orthographic and axonometric, 3d visualization, digital and physical modeling, and detailed drawings

- Students will develop their project into a fully integrated building and site taking into consideration the primary physical and spatial systems of architecture and enclosure along with the dynamic systems of environmental control, energy, water and resource management
  - 4.1: Site Integration strategies for implementing micro units on multiple sites at multiple scales, massing and orientation in response to site
  - 4.2. Networked Systems- strategies for integrating and interconnecting with the larger site

- 4.3. Dynamic Systems and responsive architecture
- 4.3. Final material strategies and feasibility, details and specifications
- Assessment/grading criteria used to generate grading rubrics.

Criteria below will be used in a matrix that is aligned with each sub assignment

- 1) Develops strategies for responding to dynamic forces of time, season and climate and availability of resources
- 2) Develops the project through clear drawings that describe a developed building design successfully integrating all the systems into an architectural project
- Project successfully demonstrates ability to apply local codes and regulations in the building design and the development of plans, sections and elevations and selection of the appropriate building systems (NAAB B.3)
- 4) Detailed technical documentation of the project through technical drawings, specifications and feasibility projections (NAAB B.4, B.10)

### Final Presentation: TBD

Activities and Processes: Development of Building Design through drawing both orthographic and axonometric, 3d visualization, digital and physical modeling, and detailed drawings

- The final presentation compiles and presents the work of the semester alongside a culminating large-scale model. A final model of the proposed project demonstrates the comprehensive qualities of the project and is intended to articulate the interrelationships between the site and building and the integration of primary and detailed building systems. The final assignment consists of the following parts
- Final Presentation: Assignment 1-4 combined and large-scale sectional model of project
- The final presentation will be a comprehensive evaluation of the work of the entire semester and will be graded on the basis of all Learning Outcomes for this course and NAAB Criteria A.4, A.5, B.2, B.3, B.4, B.6, B.7, B.8, B.9, B.10, C.2, and C.3
- Assessment/grading criteria used to generate grading rubrics.

Criteria below will be used in a matrix that is aligned with each sub assignment

- 1) Develops clear Conceptual strategies in response to site, develops clear passive design strategies of massing, orientation and passive heating and cooling (NAAB A.4, A.5, B.2, C.2)
- 2) Conceptual Building Envelope responds appropriately to site and design criteria, passive design goals (NAAB B.2, B.6, B.7)
- 3) Systems integration of building service systems and active environmental control in the creation of a holistic design (NAAB B.6, B.8, B.9)
- Project successfully demonstrates ability to apply local codes and regulations in the building design and the development of plans, sections and elevations and selection of the appropriate building systems (NAAB B.3)
- 5) Detailed technical documentation of the project through technical drawings (NAAB B.4)
- 6) Clear integrative approach and design decision making (NAAB C.2)
- 7) Develops the project through clear drawings that describe a developed building design successfully integrating all the systems into an architectural project (NAAB C.3)

### Estimate of Costs

Students should expect to expend the necessary resources to produce drafts and final for each assignment. Printing costs are depending upon current pricing and plotting costs established by the university (please see labs) and specific design solutions and material requirements for modeling materials. Estimated printing and model making costs detailed below.

Printing budget: \$500 Model making costs: \$400

There will be field trips during the semester, estimated cost \$100.

### **Attendance Policy**

Students are expected to attend each session of class to not miss key lectures, discussions and feedback. Review of assignments, presentations and critique will be presented during class time. It is not possible to make up missed lectures, discussion or critique. If a presentation is missed the material intended to be presented on that date must be submitted complete to moodle and physically presented at the next class session.

### **Moodle Policy**

Readings and assignments will be posted to moodle. Students are expected to download materials from moodle and be familiar with the material and prepared to discuss these materials in class. Students are responsible for posting all assignments by the assignment due date.

#### DEPARTMENT POLICIES AND PROCEDURES

#### **Requirements for Documentation and Archiving**

Every student is responsible for digitally archiving their work. An assignment that has not been digitally archived will be considered incomplete and will not receive credit. Please use the process provided by your instructor to produce a single PDF document for each assignment. Failure to submit the required documentation in usable format may result in a grade reduction in the final grade of the semester. Documentation of the studio work is essential for the NAAB accreditation process and assessment of the architecture program.

The university reserves the right to retain student work for archival purposes. Projects/models, assignments, and exams will be kept at the department's discretion for this purpose. Students will be asked to help with archiving their projects at the end of the semester.

#### Writing Requirements

All written work must meet the standards for English. Poorly written papers may be returned without a grade for revision and resubmission, and may be subject to grade reduction. Students are encouraged to utilize the Woodbury Writing Center.

#### **Studio Culture**

The studio environment is an essential component in learning to become an architect. One goal of the School of Architecture is to create a vibrant, exploratory, safe and respectful learning culture for students. Only through respect between faculty and students, as well as students among themselves, can a healthy educational studio culture be fostered. Students are required to uphold high standards of behavior and academic discipline while in the studio. See the full Studio Guidelines and Studio Culture Policy for more information.

#### School Policy on Social Equity and Diversity

Our mission is to provide an environment where people can learn, teach and work with a shared sense of purpose, core values and respect without bias towards individual beliefs, values and areas of difference. We do this in an effort to create a community that respects and values the full and equal inclusion of its members. Our goal is to provide an environment that is welcoming and inclusive of all.

#### Accommodations for students with identified disabilities

Woodbury University is committed to making reasonable accommodations to assist individuals with disabilities in reaching their academic potential. Students desiring accommodations due to a physical, learning or psychological disability must first complete an Accommodations Request Form, which can be downloaded from http://go.woodbury.edu, and found under "Academic Resources." Accommodations cannot be granted prior to the instructor's receipt of a Notification of Special Needs Release Form from the Disabilities Coordinator. Accommodations are never provided retroactively. (For more information, contact the Disabilities Coordinator in the Whitten Center (818) 394-3345.)

#### Academic Honesty

Because the integrity of the academic enterprise of any institution of higher education requires honesty in scholarship and research, academic honesty is required at Woodbury University. Academic integrity is important for two reasons: first, independent and original scholarship ensures that students and scholars derive the most from their educational experience and the pursuit of knowledge. Second, academic dishonesty violates the most fundamental values of a community of scholars and depreciates the achievements of the entire University community. Accordingly, Woodbury University views academic dishonesty as one of the most serious offenses that a member of our community can commit. Adherence to the Academic Honesty Policy reflects the commitment of our community to the ideals of learning, research, and scholarship. See Catalog for the entire Academic Honesty Policy.

#### Grade Requirements

Refer to the Woodbury University catalog for grading standards and policies.

#### Environmental Responsibility

Studio projects shall be designed in a socially and environmentally responsible manner. All projects should reduce dependencies on non-renewable resources.

#### **Class Attendance**

It is mandatory that students take advantage of all scheduled course time. Regular attendance at EVERY class is expected throughout the duration of the class/studio time. Arrival at the beginning of the class period is required. Lateness or early departure will be considered as an absence. Regular and prompt attendance at all university classes is required. The instructor is not obligated to assign extra work or to prepare additional examinations for classes missed. It is understood that when 15% of the class time has been missed, the student's absence rate is excessive. Each instructor will announce his/her attendance policy in the course syllabus.

#### **Excused Absence**

Students should report any illness or emergency to their course instructor, preferably before missing the class, by emailing the instructor. Written documentation (doctor's note, etc.) is required for an excused absence, and should be submitted to the instructor at the next class meeting. Extended absence due to medical issues, family issues, etc. should be reported to the Dean of Students' office for appropriate documentation.

Students who anticipate absence due to religious observance or similar commitments should speak with their instructor at the start of the term to review all dates in question and develop a plan to meet all course requirements.

#### Email

Students are advised to meet with their instructors during posted office hours. Face-to-face communication in discussing and resolving problems is preferable to email exchanges. Additionally, meetings must be scheduled in advance using email correspondence. Email correspondence must be written in a respectful and professional manner. It is the student's responsibility to consistently check for email.

#### **Grievance Protocol**

Students should use the following protocol for questions, grievances, or general concerns about coursework and the studio environment. Health and safety concerns and emergencies should immediately be directed to campus security (818-252-5208). Academic concerns should be directed first to the student's instructor, and then to the studio coordinator as appropriate. If further consultation is required, the student is advised to meet with the Coordinator and/or the Department Chair.

#### **Class Syllabus and Structure**

While every effort will be made to follow the outline of the published syllabus, course structure and calendar may be changed at the instructor or coordinator's discretion. Announcements will be made if such changes occur. Students who miss class are responsible for tracking any such announcements.

### Calculation Of Grade

Letter grades are converted to numeric values using the following values:

Letter	GPA	%	Definition
A	4.00-3.84	96-100	Student learning and accomplishment far exceeds published objectives for the course/test/assignment and student work is distinguished consistently by is high level of competency and/or innovation.
A-	3.83-3.50	92-95	
B+	3.49-3.17	88-91	Student learning and accomplishment goes beyond what is expected in the published objectives for the course/test/assignment and student work is frequently characterized by its special depth of understanding, development, and/or innovative experimentation.
В	3.16-2.84	84-87	
В-	2.83-2.50	80-83	Students learning and accomplishment meets all published objectives for the course/test/assignment and the student work demonstrates the expected level of understanding, and application of concepts introduced.
C+	2.49-2.17	76-79	
С	2.16-1.84	72-75	
C-	1.83-1.50	68-71	Student learning and accomplishment based on the published objectives for the course/test/assignment were met with minimum passing achievement.
D+	1.49-1.17	64-67	
D	1.16-0.60	60-63	
F	0.00-0.60	< 60	Student learning and accomplishment based on the published objectives for the course/test/assignment were not sufficiently addressed nor met.

# Woodbury University School of Architecture Building 4: Environmental Systems Integration ARCH 547

Semester:Spring 2020Time:Tuesday/Friday 9:00-11:30 AMLocation:AL102Instructor(s):Linda TaalmanOffice hours:Monday 1-4pm

### **Catalog Description**

Credits 3.0. Students learn an integrated approach to managing structural and environmental performance and human comfort. The approach to ambient control includes active and passive options, vernacular models, and considerations of climate and materiality. Discussion integrates the functionality, phenomenological effect, and resource impact of system selection. Prerequisites: Building 3

### Learning Outcomes

Upon completion of this course, it is expected that students will be able to:

- Experiment with building composition, systems, and assemblies as a negotiation between human comfort, environmental positioning and resource management.
- Pursue basic building performance analysis through introductions to environmental responsive modeling
- Analyze and represent building performance using modeling and diagrams and industry standard integration representation
- Demonstrate an understanding of building envelope and material assemblies and their fundamental performance characteristics and environmental impact.
- Demonstrate an understanding of environmental design, including both passive and active systems.
- Demonstrate an understanding of building services including MEP, circulation systems, and life safety systems
- Demonstrate ability to design sites and buildings compliant with accessibility and life safety
- Demonstrate ability to produce technically clear drawings and construct models detailing the assemblage of materials, systems and articulate the specific components.

### NAAB Student Performance Criteria

#### B.3: Codes and Regulations

Ability to design sites, facilities and systems consistent with the principles of life-safety standards, accessibility standards, and other codes and regulations.

### **B.4: Technical Documentation**

Ability to make technically clear drawings, prepare outline specifications, and construct models illustrating and identifying the assembly of materials, systems, and components appropriate for a building design.

### **B.6: Environmental Systems**

Understanding the principles of environmental systems' design, how systems can vary by geographic region, and the tools used for performance assessment. This must include active and passive heating and cooling, indoor air quality, solar systems, lighting systems, and acoustics.

### **B.7: Building Envelope Systems and Assemblies**

Understanding of the basic principles involved in the appropriate selection and application of building envelope systems relative to fundamental performance, aesthetics, moisture transfer, durability, and energy and material resources.

### **B.8: Building Materials and Assemblies**

Understanding of the basic principles utilized in the appropriate selection of interior and exterior construction materials, finishes, products, components and assemblies based on their inherent performance including environmental impact and reuse.

### **B.9: Building Service Systems**

Understanding of the basic principles and appropriate application and performance of building service systems including mechanical, plumbing, electrical, communication, vertical transportation, security and fire protection systems

### **B.10: Financial Considerations**

Understanding of the fundamentals of building costs, which must include project financing methods and feasibility, construction cost estimating, construction scheduling, operational costs, and life-cycle costs.

#### **Course Description**

The course explores the interrelationships of the properties of passive design, materials, environmental systems, building envelope systems, and construction technology as they influence design-development and decision making in the design of the total building. A comprehensive and integrative process is presented.

Instructional Process Lectures, reading assignments and class discussion Analytical and generative modeling assignments Critique of student presentations- graphic, verbal and written material

### Schedule and Deliverables

Week 1: Introduction

Week 2-5: Assignment A-C (11x17) February 11: Presentation A-C Week 6-8: Assignment D-E (11x17) March 7: Midterm Presentation

Week 9-13: Assignment F-H (11x17) April 14- Final Presentation of A-H

May 1- Integrated Presentation with ARCH 589 Final

### **Final Grade Calculation**

10%- Assignment A- Building Material and Assembly
10%- Assignment B- Building Envelope
10%- Assignment C- Environment 1: Passive Environmental Systems
10%- Assignment D- Environment 2: Active Environmental Systems
10%- Assignment E- Building Service Systems: Water and Power
10%- Assignment F- Site Analysis, Massing and Orientation in Response to Site
10%- Assignment G- Larger Building Service Systems: Circulation, MEP, AV/Security
10%- Assignment H- Outline Specification, Construction and Building Details
10%- Attendance and Participation
10%- Final Presentation

Students will be asked to apply the principals learned through analysis and design in 8 assignments developing the students' design projects in the Total Building Studio. Assignments will utilize the model and diagram as the key tools for analysis, design, representation and communication of building systems. The assignments aim to analyze and design the systems as a series of discrete systems that work together to serve a holistic design.

Assignments A-C will develop material and envelope research and design and establish the passive design of environmental systems.

Assignments D-E will develop the active environmental systems and essential water and power systems

Assignments F-H will develop the site-specific relationships using the selected systems and develop the design for specific sites and further develop the larger networked systems and building details.

Students are expected to demonstrate their understanding of the systems through each assignment. Assignment A-H will be subdivided into weekly assignments with value distributed equally between the parts, drafts of each weekly assignment are due each week, the midterm and final presentations will compile the work completed from weekly assignments. The final presentation of the Total Building will include an integrated presentation of the work from A-H from this course.

Criteria for Evaluation

Each Assignment will be evaluated for its

- 1. Analysis and Design clarity of systems
- 2. Articulation of detail, reference, description and justification of each system selection
- 3. Development of clear concepts that negotiate design and integration of building systems

Each Assignment will also be evaluated for the following specific criteria Assignment A- Building Material and Assembly (NAAB B-8) Assignment B- Building Envelope (NAAB B-7) Assignment C- Environment 1: Passive Environmental Systems (NAAB B-6) Assignment D- Environment 2: Active Environmental Systems (NAAB B-6) Assignment E- Building Service Systems: Water and Power NAAB B-6 and B-9) Assignment F- Site Analysis, Massing and Orientation in Response to Site (NAAB B-6 and B-7) Assignment G- Larger Building Service Systems: Circulation, MEP, AV/Security (NAAB B-3 and B-9) Assignment H- Outline Specification, Construction and Building Details (NAAB B-4 and B-10)

### Estimate of Costs

Students should expect to expend the necessary resources to produce drafts and final for each assignment. Printing costs are depending upon current pricing and plotting costs established by the university (please see labs) and specific design solutions and material requirements for modeling materials.

### **Attendance Policy**

Students are expected to attend each session of class to not miss key lectures, discussions and feedback. Review of assignments, presentations and critique will be presented during class time. It is not possible to make up missed lectures, discussion or critique. If a presentation is missed the material intended to be presented on that date must be submitted complete to moodle and physically presented at the next class session.

### **Moodle Policy**

Readings and assignments will be posted to moodle. Students are expected to download materials from moodle and be familiar with the material and prepared to discuss these materials in class. Students are responsible for posting all assignments by the assignment due date.

#### DEPARTMENT POLICIES AND PROCEDURES

#### **Requirements for Documentation and Archiving**

Every student is responsible for digitally archiving their work. An assignment that has not been digitally archived will be considered incomplete and will not receive credit. Please use the process provided by your instructor to produce a single PDF document for each assignment. Failure to submit the required documentation in usable format may result in a grade reduction in the final grade of the semester. Documentation of the studio work is essential for the NAAB accreditation process and assessment of the architecture program.

The university reserves the right to retain student work for archival purposes. Projects/models, assignments, and exams will be kept at the department's discretion for this purpose. Students will be asked to help with archiving their projects at the end of the semester.

#### Writing Requirements

All written work must meet the standards for English. Poorly written papers may be returned without a grade for revision and resubmission, and may be subject to grade reduction. Students are encouraged to utilize the Woodbury Writing Center.

#### **Studio Culture**

The studio environment is an essential component in learning to become an architect. One goal of the School of Architecture is to create a vibrant, exploratory, safe and respectful learning culture for students. Only through respect between faculty and students, as well as students among themselves, can a healthy educational studio culture be fostered. Students are required to uphold high standards of behavior and academic discipline while in the studio. See the full Studio Guidelines and Studio Culture Policy for more information.

#### School Policy on Social Equity and Diversity

Our mission is to provide an environment where people can learn, teach and work with a shared sense of purpose, core values and respect without bias towards individual beliefs, values and areas of difference. We do this in an effort to create a community that respects and values the full and equal inclusion of its members. Our goal is to provide an environment that is welcoming and inclusive of all.

#### Accommodations for students with identified disabilities

Woodbury University is committed to making reasonable accommodations to assist individuals with disabilities in reaching their academic potential. Students desiring accommodations due to a physical, learning or psychological disability must first complete an Accommodations Request Form, which can be downloaded from http://go.woodbury.edu, and found under "Academic Resources." Accommodations cannot be granted prior to the instructor's receipt of a Notification of Special Needs Release Form from the Disabilities Coordinator. Accommodations are never provided retroactively. (For more information, contact the Disabilities Coordinator in the Whitten Center (818) 394-3345.)

#### Academic Honesty

Because the integrity of the academic enterprise of any institution of higher education requires honesty in scholarship and research, academic honesty is required at Woodbury University. Academic integrity is important for two reasons: first, independent and original scholarship ensures that students and scholars derive the most from their educational experience and the pursuit of knowledge. Second, academic dishonesty violates the most fundamental values of a community of scholars and depreciates the achievements of the entire University community. Accordingly, Woodbury University views academic dishonesty as one of the most serious offenses that a member of our community can commit. Adherence to the Academic Honesty Policy reflects the commitment of our community to the ideals of learning, research, and scholarship. See Catalog for the entire Academic Honesty Policy.

#### Grade Requirements

Refer to the Woodbury University catalog for grading standards and policies.

#### **Environmental Responsibility**

Studio projects shall be designed in a socially and environmentally responsible manner. All projects should reduce dependencies on non-renewable resources.

#### **Class Attendance**

It is mandatory that students take advantage of all scheduled course time. Regular attendance at EVERY class is expected throughout the duration of the class/studio time. Arrival at the beginning of the class period is required. Lateness or early departure will be considered as an absence. Regular and prompt attendance at all university classes is required. The instructor is not obligated to assign extra work or to prepare additional examinations for classes missed. It is understood that when 15% of the class time has been missed, the student's absence rate is excessive. Each instructor will announce his/her attendance policy in the course syllabus.

#### **Excused Absence**

Students should report any illness or emergency to their course instructor, preferably before missing the class, by emailing the instructor. Written documentation (doctor's note, etc.) is required for an excused absence, and should be submitted to the instructor at the next class meeting. Extended absence due to medical issues, family issues, etc. should be reported to the Dean of Students' office for appropriate documentation.

Students who anticipate absence due to religious observance or similar commitments should speak with their instructor at the start of the term to review all dates in question and develop a plan to meet all course requirements.

#### Email

Students are advised to meet with their instructors during posted office hours. Face-to-face communication in discussing and resolving problems is preferable to email exchanges. Additionally, meetings must be scheduled in advance using email correspondence. Email correspondence must be written in a respectful and professional manner. It is the student's responsibility to consistently check for email.

#### **Grievance Protocol**

Students should use the following protocol for questions, grievances, or general concerns about coursework and the studio environment. Health and safety concerns and emergencies should immediately be directed to campus security (818-252-5208). Academic concerns should be directed first to the student's instructor, and then to the studio coordinator as appropriate. If further consultation is required, the student is advised to meet with the Coordinator and/or the Department Chair.

#### **Class Syllabus and Structure**

While every effort will be made to follow the outline of the published syllabus, course structure and calendar may be changed at the instructor or coordinator's discretion. Announcements will be made if such changes occur. Students who miss class are responsible for tracking any such announcements.

### Calculation Of Grade

Letter grades are converted to numeric values using the following values:

Letter	GPA	%	Definition
А	4.00-3.84	96-100	Student learning and accomplishment far exceeds published objectives for the course/test/assignment and student work is distinguished consistently by is high level of competency and/or innovation.
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B+	3.49-3.17	88-91	Student learning and accomplishment goes beyond what is expected in the published objectives for the course/test/assignment and student work is frequently characterized by its special depth of understanding, development, and/or innovative experimentation.
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B-	2.83-2.50	80-83	Students learning and accomplishment meets all published objectives for the course/test/assignment and the student work demonstrates the expected level of understanding, and application of concepts introduced.
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D+	1.49-1.17	64-67	
D	1.16-0.60	60-63	
F	0.00-0.60	< 60	Student learning and accomplishment based on the published objectives for the course/test/assignment were not sufficiently addressed nor met.

# Syllabi B.4 Site Design (M. Arch)

# Woodbury University School of Architecture Building 4: Environmental Systems Integration ARCH 547

Semester:Spring 2020Time:Tuesday/Friday 9:00-11:30 AMLocation:AL102Instructor(s):Linda TaalmanOffice hours:Monday 1-4pm

### **Catalog Description**

Credits 3.0. Students learn an integrated approach to managing structural and environmental performance and human comfort. The approach to ambient control includes active and passive options, vernacular models, and considerations of climate and materiality. Discussion integrates the functionality, phenomenological effect, and resource impact of system selection. Prerequisites: Building 3

### Learning Outcomes

Upon completion of this course, it is expected that students will be able to:

- Experiment with building composition, systems, and assemblies as a negotiation between human comfort, environmental positioning and resource management.
- Pursue basic building performance analysis through introductions to environmental responsive modeling
- Analyze and represent building performance using modeling and diagrams and industry standard integration representation
- Demonstrate an understanding of building envelope and material assemblies and their fundamental performance characteristics and environmental impact.
- Demonstrate an understanding of environmental design, including both passive and active systems.
- Demonstrate an understanding of building services including MEP, circulation systems, and life safety systems
- Demonstrate ability to design sites and buildings compliant with accessibility and life safety
- Demonstrate ability to produce technically clear drawings and construct models detailing the assemblage of materials, systems and articulate the specific components.

### NAAB Student Performance Criteria

#### B.3: Codes and Regulations

Ability to design sites, facilities and systems consistent with the principles of life-safety standards, accessibility standards, and other codes and regulations.

### **B.4: Technical Documentation**

Ability to make technically clear drawings, prepare outline specifications, and construct models illustrating and identifying the assembly of materials, systems, and components appropriate for a building design.

### **B.6: Environmental Systems**

Understanding the principles of environmental systems' design, how systems can vary by geographic region, and the tools used for performance assessment. This must include active and passive heating and cooling, indoor air quality, solar systems, lighting systems, and acoustics.

### **B.7: Building Envelope Systems and Assemblies**

Understanding of the basic principles involved in the appropriate selection and application of building envelope systems relative to fundamental performance, aesthetics, moisture transfer, durability, and energy and material resources.

### **B.8: Building Materials and Assemblies**

Understanding of the basic principles utilized in the appropriate selection of interior and exterior construction materials, finishes, products, components and assemblies based on their inherent performance including environmental impact and reuse.

### **B.9: Building Service Systems**

Understanding of the basic principles and appropriate application and performance of building service systems including mechanical, plumbing, electrical, communication, vertical transportation, security and fire protection systems

### **B.10: Financial Considerations**

Understanding of the fundamentals of building costs, which must include project financing methods and feasibility, construction cost estimating, construction scheduling, operational costs, and life-cycle costs.

#### **Course Description**

The course explores the interrelationships of the properties of passive design, materials, environmental systems, building envelope systems, and construction technology as they influence design-development and decision making in the design of the total building. A comprehensive and integrative process is presented.

Instructional Process Lectures, reading assignments and class discussion Analytical and generative modeling assignments Critique of student presentations- graphic, verbal and written material

### Schedule and Deliverables

Week 1: Introduction

Week 2-5: Assignment A-C (11x17) February 11: Presentation A-C Week 6-8: Assignment D-E (11x17) March 7: Midterm Presentation

Week 9-13: Assignment F-H (11x17) April 14- Final Presentation of A-H

May 1- Integrated Presentation with ARCH 589 Final

### **Final Grade Calculation**

10%- Assignment A- Building Material and Assembly
10%- Assignment B- Building Envelope
10%- Assignment C- Environment 1: Passive Environmental Systems
10%- Assignment D- Environment 2: Active Environmental Systems
10%- Assignment E- Building Service Systems: Water and Power
10%- Assignment F- Site Analysis, Massing and Orientation in Response to Site
10%- Assignment G- Larger Building Service Systems: Circulation, MEP, AV/Security
10%- Assignment H- Outline Specification, Construction and Building Details
10%- Attendance and Participation
10%- Final Presentation

Students will be asked to apply the principals learned through analysis and design in 8 assignments developing the students' design projects in the Total Building Studio. Assignments will utilize the model and diagram as the key tools for analysis, design, representation and communication of building systems. The assignments aim to analyze and design the systems as a series of discrete systems that work together to serve a holistic design.

Assignments A-C will develop material and envelope research and design and establish the passive design of environmental systems.

Assignments D-E will develop the active environmental systems and essential water and power systems

Assignments F-H will develop the site-specific relationships using the selected systems and develop the design for specific sites and further develop the larger networked systems and building details.

Students are expected to demonstrate their understanding of the systems through each assignment. Assignment A-H will be subdivided into weekly assignments with value distributed equally between the parts, drafts of each weekly assignment are due each week, the midterm and final presentations will compile the work completed from weekly assignments. The final presentation of the Total Building will include an integrated presentation of the work from A-H from this course.

Criteria for Evaluation

Each Assignment will be evaluated for its

- 1. Analysis and Design clarity of systems
- 2. Articulation of detail, reference, description and justification of each system selection
- 3. Development of clear concepts that negotiate design and integration of building systems

Each Assignment will also be evaluated for the following specific criteria Assignment A- Building Material and Assembly (NAAB B-8) Assignment B- Building Envelope (NAAB B-7) Assignment C- Environment 1: Passive Environmental Systems (NAAB B-6) Assignment D- Environment 2: Active Environmental Systems (NAAB B-6) Assignment E- Building Service Systems: Water and Power NAAB B-6 and B-9) Assignment F- Site Analysis, Massing and Orientation in Response to Site (NAAB B-6 and B-7) Assignment G- Larger Building Service Systems: Circulation, MEP, AV/Security (NAAB B-3 and B-9) Assignment H- Outline Specification, Construction and Building Details (NAAB B-4 and B-10)

### Estimate of Costs

Students should expect to expend the necessary resources to produce drafts and final for each assignment. Printing costs are depending upon current pricing and plotting costs established by the university (please see labs) and specific design solutions and material requirements for modeling materials.

### **Attendance Policy**

Students are expected to attend each session of class to not miss key lectures, discussions and feedback. Review of assignments, presentations and critique will be presented during class time. It is not possible to make up missed lectures, discussion or critique. If a presentation is missed the material intended to be presented on that date must be submitted complete to moodle and physically presented at the next class session.

### **Moodle Policy**

Readings and assignments will be posted to moodle. Students are expected to download materials from moodle and be familiar with the material and prepared to discuss these materials in class. Students are responsible for posting all assignments by the assignment due date.

#### DEPARTMENT POLICIES AND PROCEDURES

#### **Requirements for Documentation and Archiving**

Every student is responsible for digitally archiving their work. An assignment that has not been digitally archived will be considered incomplete and will not receive credit. Please use the process provided by your instructor to produce a single PDF document for each assignment. Failure to submit the required documentation in usable format may result in a grade reduction in the final grade of the semester. Documentation of the studio work is essential for the NAAB accreditation process and assessment of the architecture program.

The university reserves the right to retain student work for archival purposes. Projects/models, assignments, and exams will be kept at the department's discretion for this purpose. Students will be asked to help with archiving their projects at the end of the semester.

#### Writing Requirements

All written work must meet the standards for English. Poorly written papers may be returned without a grade for revision and resubmission, and may be subject to grade reduction. Students are encouraged to utilize the Woodbury Writing Center.

#### **Studio Culture**

The studio environment is an essential component in learning to become an architect. One goal of the School of Architecture is to create a vibrant, exploratory, safe and respectful learning culture for students. Only through respect between faculty and students, as well as students among themselves, can a healthy educational studio culture be fostered. Students are required to uphold high standards of behavior and academic discipline while in the studio. See the full Studio Guidelines and Studio Culture Policy for more information.

#### School Policy on Social Equity and Diversity

Our mission is to provide an environment where people can learn, teach and work with a shared sense of purpose, core values and respect without bias towards individual beliefs, values and areas of difference. We do this in an effort to create a community that respects and values the full and equal inclusion of its members. Our goal is to provide an environment that is welcoming and inclusive of all.

#### Accommodations for students with identified disabilities

Woodbury University is committed to making reasonable accommodations to assist individuals with disabilities in reaching their academic potential. Students desiring accommodations due to a physical, learning or psychological disability must first complete an Accommodations Request Form, which can be downloaded from http://go.woodbury.edu, and found under "Academic Resources." Accommodations cannot be granted prior to the instructor's receipt of a Notification of Special Needs Release Form from the Disabilities Coordinator. Accommodations are never provided retroactively. (For more information, contact the Disabilities Coordinator in the Whitten Center (818) 394-3345.)

#### Academic Honesty

Because the integrity of the academic enterprise of any institution of higher education requires honesty in scholarship and research, academic honesty is required at Woodbury University. Academic integrity is important for two reasons: first, independent and original scholarship ensures that students and scholars derive the most from their educational experience and the pursuit of knowledge. Second, academic dishonesty violates the most fundamental values of a community of scholars and depreciates the achievements of the entire University community. Accordingly, Woodbury University views academic dishonesty as one of the most serious offenses that a member of our community can commit. Adherence to the Academic Honesty Policy reflects the commitment of our community to the ideals of learning, research, and scholarship. See Catalog for the entire Academic Honesty Policy.

#### Grade Requirements

Refer to the Woodbury University catalog for grading standards and policies.

#### **Environmental Responsibility**

Studio projects shall be designed in a socially and environmentally responsible manner. All projects should reduce dependencies on non-renewable resources.

#### **Class Attendance**

It is mandatory that students take advantage of all scheduled course time. Regular attendance at EVERY class is expected throughout the duration of the class/studio time. Arrival at the beginning of the class period is required. Lateness or early departure will be considered as an absence. Regular and prompt attendance at all university classes is required. The instructor is not obligated to assign extra work or to prepare additional examinations for classes missed. It is understood that when 15% of the class time has been missed, the student's absence rate is excessive. Each instructor will announce his/her attendance policy in the course syllabus.

#### **Excused Absence**

Students should report any illness or emergency to their course instructor, preferably before missing the class, by emailing the instructor. Written documentation (doctor's note, etc.) is required for an excused absence, and should be submitted to the instructor at the next class meeting. Extended absence due to medical issues, family issues, etc. should be reported to the Dean of Students' office for appropriate documentation.

Students who anticipate absence due to religious observance or similar commitments should speak with their instructor at the start of the term to review all dates in question and develop a plan to meet all course requirements.

#### Email

Students are advised to meet with their instructors during posted office hours. Face-to-face communication in discussing and resolving problems is preferable to email exchanges. Additionally, meetings must be scheduled in advance using email correspondence. Email correspondence must be written in a respectful and professional manner. It is the student's responsibility to consistently check for email.

#### **Grievance Protocol**

Students should use the following protocol for questions, grievances, or general concerns about coursework and the studio environment. Health and safety concerns and emergencies should immediately be directed to campus security (818-252-5208). Academic concerns should be directed first to the student's instructor, and then to the studio coordinator as appropriate. If further consultation is required, the student is advised to meet with the Coordinator and/or the Department Chair.

#### **Class Syllabus and Structure**

While every effort will be made to follow the outline of the published syllabus, course structure and calendar may be changed at the instructor or coordinator's discretion. Announcements will be made if such changes occur. Students who miss class are responsible for tracking any such announcements.

### Calculation Of Grade

Letter grades are converted to numeric values using the following values:

Letter	GPA	%	Definition
А	4.00-3.84	96-100	Student learning and accomplishment far exceeds published objectives for the course/test/assignment and student work is distinguished consistently by is high level of competency and/or innovation.
A-	3.83-3.50	92-95	
B+	3.49-3.17	88-91	Student learning and accomplishment goes beyond what is expected in the published objectives for the course/test/assignment and student work is frequently characterized by its special depth of understanding, development, and/or innovative experimentation.
В	3.16-2.84	84-87	
B-	2.83-2.50	80-83	Students learning and accomplishment meets all published objectives for the course/test/assignment and the student work demonstrates the expected level of understanding, and application of concepts introduced.
C+	2.49-2.17	76-79	
С	2.16-1.84	72-75	
C-	1.83-1.50	68-71	Student learning and accomplishment based on the published objectives for the course/test/assignment were met with minimum passing achievement.
D+	1.49-1.17	64-67	
D	1.16-0.60	60-63	
F	0.00-0.60	< 60	Student learning and accomplishment based on the published objectives for the course/test/assignment were not sufficiently addressed nor met.

Woodbury University School of Architecture Grad Studio 3 : ReForm: A New Civics Institute ARCH 587

- Semester: Fall 2020
- Time: Tuesday / Friday 1:00-6:00
- Location: Online
- Instructors: Cody Miner
- Office Hours: Upon Request



The Parker Center on April 29, 1992, after the jury's decision in the Rodney King case.

#### **Course Description**

Architecture in its disciplinary form has expressed a desire to continue the project of autonomy, that being a project unencumbered by circumstance. But architecture never operates purely in a vacuum, forces cultural and political, influence the world in which it operates and also amends its ontological shape and sensibilities. This allows for the architectural project to maintain its relevance while exploring new territories in values, all of which should be enticing to the architect.

Our project for the semester will focus on a historically loaded site in Downtown Los Angeles, formally known as the Parker Center, home to the LAPD from 1950-2009 and also used as a symbolic prop for the police in its Hollywood representation. With it recent demolition, the site had a vision within a larger master plan of a civic center office tower housing government workers. This vision met its demise as it was plagued with internal corruption with city council, a sketchy financial backing, and a climate fraught for change. Our goal will be to rescue the site from its toxic history new and old and return it back to the people in way of a Cultural Development Center & Civics Academy. A new utopian style typology, the Civics Academy will act as an institutional campus style program, built to enhance its citizens with knowledge of their rights and the functions of government.

Within our exploration of the new Civics Academy we will pursue several factors engaged within a comprehensive project including ground, mass, tectonics, façade articulation, interiority, and infrastructure, all while negotiating issues of context, or what does it mean for the project to be

contextual. Ideas and the default form of contextualism rely heavily on the replications and reproduction of its preconceived urban existence. In a way, what will be should culminate in what already exists. This type of developer friendly notion to contextualism ignores the process of reformation. Investigations in existing facades and form while be our drivers in expressing novelty and interaction with the city. Our new proposals will have to jostle, lift and reposition in order to allow itself situated amongst its predisposed ground and proximities.

Lastly the studio will focus on the types of people or personalities that will inhabit the projects. Usually architectural renderings are filled with generic silhouettes with grey fill, expressing no personality. Each student will explore the making of their own entourage and individual personalities in order to answer the question: Who will inhabit this project?

#### **Catalog Description**

Systemic understanding of architecture is broadened through examination of the architectural object as a microcosm of an ever-expanding context, of a community or city as recycled. Building is introduced as infrastructure and infrastructure as intervention within ecology, land-and urban-scape, site and territory. Studio, twelve hours per week. Prerequisite: ARCH 584, Graduate Studio 2 or advanced placement.

Six Unit Studio.

### Learning Outcomes

Minimum to NAAB Criteria:

PC.2: Design: How the program instills in students the role of the design process in shaping the built environment and conveys the methods by which design processes integrate multiple factors, in different settings and scales of development, from buildings to cities.

Learning Outcome: Identify, catalog, and respond to an urban context and site conditions.

PC.3 Ecological Knowledge and Responsibility: How the program instills in students a holistic understanding of the dynamic between built and natural environments, enabling future architects to mitigate climate change responsibly by leveraging ecological, advanced building performance, adaptation, and resilience principles in their work and advocacy activities.

Learning Outcome: Understanding the impact of urban and site development on climate justice.

PC.7: Learning and Teaching Culture: How the program fosters and ensures a positive and respectful environment that encourages optimism, respect, sharing, engagement, and innovation among its faculty, students, administration, and staff.

Learning Outcome: Present, discuss, and debate work in a public forum.

SC.3 Regulatory Context: How the program ensures that students understand the fundamental principles of life safety, land use, and current laws and regulations that apply to buildings and sites in the United States, and the evaluative process architects use to comply with those laws and regulations as part of a project.

Learning Outcome: Cite and diagram codes, regulations, and evaluative processes that address zoning in buildings and on sites.

SC.5 Design Synthesis: How the program ensures that students develop the ability to make design decisions within architectural projects while demonstrating synthesis of user

requirements, regulatory requirements, site conditions, and accessible design, and consideration of the measurable environmental impacts of their design decisions.

Learning Outcome: Design buildings and sites within the regulatory framework that governs zoning.

### Student Learning Objectives:

<u>Positions</u>. Students will advance their skills to formulate a clear disciplinary position supported by relevant texts and historic and contemporary precedents, and incorporate that position into advanced representations of a building proposal.

<u>Precedents</u>. Advance the skills to research, examine and comprehend specific design principles present in relevant historic and contemporary precedents, and to make choices regarding the incorporation of those principles into a building proposal.

<u>Integrated Design</u>. Develop the skills to work independently and successfully design an integrative building project.

<u>Professional Communication.</u> Students will advance skills in the professional communication of architectural concepts using the mediums of drawing and modeling and verbal and written presentation.

<u>Techniques.</u> Students will advance technical skills regarding modeling, drawing, and representation.

#### Schedule and Deliverables

Week 1 08/25: Syllabus, Intro, Ex 1 Site & Precedent 08/28 : Working Session

Week 2 09/01: Ex 1 due, Ex 2 Context Façade Study 09/04: Working Session

Week 3 09/08 : Ex 2 due, Ex 3 Context Volume 09/11 : Working Session

Week 4 09/15 : Ex 3 due, Ex 4 Stack Slice 09/18: On site

Week 5 09/22 : Ex 4 due, Ex 5 Planametric Wrap 09/25 : On site / Ground

*Week* 6 09/29 : 1st *REVIEW* 10/02 : Working Session

Week 7 10/06 : NO CLASS 10/09 : Working Session Week 8 10/13 : Working Session 10/16 : *Mid Review* 

Week 9 10/20 : Interiority 10/23 : Working Session

Week 10 10/27: Working Session 10/30 : Working Session

Week 11 11/03: Articulation 11/06 : Working Session

Week 12 11/10 : Working Session 11/13 : Representation / Entourage

*Week 13* 11/17: Working Session 11/20: Working Session

Week 14 11/24 : Pinup 11/27 : NO CLASS

Week 15 12/01 : Pinup Final TBD

### Final Grade Calculation

Attendance/Participation/Assignments: 20% Midreview: 30 Final Review: 50%

### Assignments, Assessment and Readings

Assignments will be dispersed throughout the course, each given with their means of evaluation and assessment. Overall, each assignment will be graded upon the method, professionalism, and overall craft digitally or manually. Readings will be posted to Moodle in order for class discussion, please be sure to check Moodle frequently for any readings posted for that week.

### Estimate of Costs

Model making materials such as an Olfa, cutting mat, and foam core will be used for small models throughout this semester. Products can be purchased at your local arts and crafts store, or online at Blick.com or Amazon. Also, some printing costs may occur with model making techniques.

### Attendance Policy

Attendance during scheduled meeting times is required, and participation in the discussion and review session is a major part of the grade. If a student plans to miss a class, please notify the instructor beforehand with a written excuse. If attendance and work production fall behind during the semester, the student will be notified of failure in the course.

### Submitting Late Work

Students who submit work late to Moodle or pin up work late in Concept Board will have their grade directly affected depending on the lateness of submission. So turn in work on time!

### Moodle Policy

Assignments, reading materials and material submission will take place on Moodle. Please get yourself acclimated and comfortable with Moodle, as it will be our way of submitting work to be graded. Reviews and pinups will be viewed in Concept Board, a link will be supplied using Moodle.

### Web Cam Usage

During class meetings, students are required to turn on their video cameras and microphones. If you are uncomfortable doing so, please reach out ton instructor to discuss. While in class sessions, please dress appropriately, and attempt to be in a private space, movement and distractions in the background tend to create a disruptive environment.

#### DEPARTMENT POLICIES AND PROCEDURES

Requirements for Documentation and Archiving Each student must submit documentation of the full semester's work at the end of each term, in pdf format. Materials should include research, writing, and design work, including important study models and sketches. Studio faculty will further define how this work should be organized and presented before the end of the semester. Failure to submit the required documentation in usable format may result in a grade reduction in the final grade of the semester. Documentation of the studio work is essential for the NAAB accreditation process and assessment of the architecture program.

The university reserves the right to retain student work for archival purposes. Projects/models, assignments, and exams will be kept at the department's discretion for this purpose. Students will be asked to help with archiving their projects at the end of the semester.

#### Writing Requirements

All written work must meet the standards for English. Poorly written papers may be returned without a grade for revision and resubmission, and may be subject to grade reduction. Students are encouraged to utilize the Woodbury Writing Center. Link is <u>here</u>.

#### **Studio Culture**

The studio environment is an essential component in learning to become an architect. One goal of the School of Architecture is to create a vibrant, exploratory, safe and respectful learning culture for students. Only through respect between faculty and students, as well as students among themselves, can a healthy educational studio culture be fostered. Students are required to uphold high standards of behavior and academic discipline while in the studio. See the full Studio Guidelines and Studio Culture Policy for more information.

#### School Policy on Social Equity and Diversity

Our mission is to provide an environment where people can learn, teach and work with a shared sense of purpose, core values and respect without bias towards individual beliefs, values and areas of difference. We do this in an effort to create a community that respects and values the full and equal inclusion of its members. Our goal is to provide an environment that is welcoming and inclusive of all.

#### Universal Pedagogy

Woodbury University is committed to making reasonable accommodations to assist individuals with disabilities in reaching their academic potential. Students desiring accommodations due to a physical, learning or psychological disability must first complete an Accommodations Request Form, which can be downloaded from http://go.woodbury.edu, and found under "Academic Resources." Accommodations cannot be granted prior to the instructor's receipt of a Notification of Academic Accommodation Plan (NAAP) from the Disabilities Coordinator. Accommodations are never provided retroactively. (For more information, contact the Disabilities Coordinator in the Whitten Center (818) 394-3345.)

#### **Academic Honesty**

Academic integrity is important for two reasons: first, independent and original scholarship ensures that students and scholars derive the most from their educational experience and the pursuit of knowledge. Second, academic dishonesty violates the most fundamental values of a community of scholars and depreciates the achievements of the entire University community. Accordingly, Woodbury University views academic dishonesty as one of the most serious offenses that a member of our community can commit. Adherence to the Academic Honesty Policy reflects the commitment of our community to the ideals of learning, research, and scholarship. See Catalog for the entire Academic Honesty Policy.

#### **Grade Requirements**

Refer to the Woodbury University catalog for grading standards and policies.

#### **Environmental Responsibility**

Studio projects shall be designed in a socially and environmentally responsible manner. All projects should reduce dependencies on non-renewable resources.

#### **Class Attendance**

It is mandatory that students take advantage of all scheduled course time. Regular attendance at EVERY class is expected throughout the duration of the class/studio time. Arrival at the beginning of the class period is required. Lateness or early departure will be considered as an absence. 'Regular and prompt attendance at all university classes is required. The instructor is not obligated to assign extra work or to prepare additional examinations for classes missed. It is understood that when 15% of the class time has been missed, the student's absence rate is excessive. Each instructor will announce his/her attendance policy in the course syllabus.

#### **Excused Absence**

Students should report any illness or emergency to their course instructor, preferably before missing the class, by emailing the instructor. Medical reasons for absences can alternatively be shared with the school nurse and/or the coordinator for the ODAS (disabilities office) who will notify instructor of receipt without revealing specific information.

Students who anticipate absence due to religious observance or similar commitments should speak with their instructor at the start of the term to review all dates in question and develop a plan to meet all course requirements.

#### Email

Students are advised to meet with their instructors during posted office hours. Face-to-face communication in discussing and resolving problems is preferable to email exchanges. Additionally, meetings must be scheduled in advance using email correspondence. Email correspondence must be written in a respectful and professional manner. It is the student's responsibility to consistently check for email. students should use their official woodbury.edu email account.

Due to confidentiality and FERPA requirements all faculty, staff and students, when corresponding through email, must use their university provided Woodbury.edu email accounts. Students are encouraged to check this email address regularly as it is the only email address in which they will receive official course or university information.

#### **Grievance Protocol**

Students should use the following protocol for questions, grievances, or general concerns about coursework and the studio environment. Health and safety concerns and emergencies should immediately be directed to campus security (818-252-5208). Academic concerns should be directed first to the student's instructor, and then to the

studio coordinator as appropriate. If further consultation is required, the student is advised to meet with the Coordinator and/or the Chair (Marc Neveu, both Undergraduate and Graduate).

#### **Class Syllabus and Structure**

While every effort will be made to follow the outline of the published syllabus, course structure and calendar may be changed at the instructor or coordinator's discretion. Announcements will be made if such changes occur. Students who miss class are responsible for tracking any such announcements.

#### ONLINE COURSE DELIVERY POLICIES AND GUIDELINES

#### Formats of delivery:

**Synchronous online:** All instruction is provided via the Internet and no face-to-face instruction is required. Faculty and learners meet for regularly scheduled class sessions.

Synchronous activities provide real-time dialogue that can provide the human interaction that is needed among our Woodbury student population.

**asynchronous online**: All instruction is provided via the Internet and no face-to-face instruction is required. Faculty and learners do not meet for regularly scheduled class sessions.

Asynchronous activities allow students with the flexibility to complete certain course work at their own pace, within reason. It also allows students time to think, write, and reflect.

**hybrid with synchronous online:** An instructional delivery method which combines the traditional delivery and the synchronous distance delivery formats.

**hybrid with asynchronous online:** An instructional delivery method which combines the traditional delivery and the synchronous_distance delivery formats.

traditional: This delivery method allows learners and faculty to meet in person or as a group for regularly scheduled class sessions either on campus or at another physical location.

#### Type of course:

Lecture: Refers to the first or primary organization of non-lab class instruction, e.g., a lecture where instructor-based material is presented, or a seminar where material is analyzed and discussed by both students and instructor. Also includes case studies and team-based learning situations. Class meeting time equals 50 minutes per unit per week.

Studio: Refers to situations where the student is engaged in the practice and use of techniques for productions in the areas of architecture, interior design, graphic design, and other design forms. This instruction is used to further advance student's skills in their field of design. The instructor role varies from direct assistance to simple availability for questions and supervision. Class meeting time equals 100 minutes per unit per week.

Laboratory: Refers to the first organization of laboratory class instruction unless one of the other classifications above is more appropriate. Includes both group instruction and individualized instruction such as biology and physics lessons, supervised computing exercises, and hands-on

activities. Class meeting time equals 50 minutes per unit per week.

#### Length of sessions:

16-week (Fall/Spring) 7-week intensive format (Fall/Spring) 5-week intensive format (Fall/Spring) 10-week (Summer) 6-week (Summer Super Sessions)

#### **Online / Hybrid Requirements**

Students must have basic computer skills, including the use of word processing software, email, and the ability to use internet browsers, such as Safari, Firefox, or Chrome.

All communication by email will be using the assigned woodbury.edu address. Students are required to access this email account on a daily base to ensure timely communication.

Woodbury University's Learning Management System (LMS) of record is Moodle. Moodle should be used to provide students information they need to plan, prepare, and learn in the course. This information includes, but is not limited to: (a) your course syllabus; (b) assignment due dates, instructions, and grading rubrics; (c) course schedule; (d) additional course materials and links, etc.; and/or (e) exams.

Students are responsible for meeting the technical requirements of <u>Moodle</u> and <u>RingCentral</u> and to familiarize themselves with the Moodle Learning Management System and RingCentral Communications System.

IT provides a Moodle (and RingCentral for online delivery) orientation "course" visible to students enrolled in all courses. Students unfamiliar with Moodle are required to review or consult it as needed. This ensures class time is dedicated to course content and not technical tutorials. The syllabus should also indicate how IT will support students' online technical needs.

All required materials, including readings, videos, lectures will be posted on and can be accessed through Moodle.

All assignments have to be submitted through Moodle or <u>OneDrive</u>, depending on file size and faculty instructions.

Exams and quizzes will be administered through either Moodle or <u>Proctorio</u>. Students are required to install the Proctorio Extension in advance.

#### Attendance policy

Regular and prompt attendance at all University classes is required. It is the responsibility of the student to adhere to class/studio participation expectations. The instructor is not obligated to assign extra work or to prepare additional content for material missed. It is understood that when 15% of the class time has been missed, the student's absence rate is excessive. The interpretation of this participation policy is left to the discretion of individual faculty.

Attendance of synchronous classes will be measured through attendance of the RingCentral meetings. Students are required to have their camera turned on for the entire class session to be counted as present. If technical or privacy issues prevent the student from having the camera turned on, then the student must contact the Office of Student Affairs and apply for an exemption. Students must complete an Accommodations Request Form, which can be downloaded from http://go.woodbury.edu, and found under "Academic Resources." Accommodations cannot be granted prior to the instructor's receipt of a Notification of Special Needs Release Form from the Disabilities Coordinator. Accommodations are never provided retroactively.

Attendance of asynchronous classes will be measured through the last access to the course in Moodle, participation in quizzes and online discussions, as well as submitted assignments by the required day and time.

#### Protecting Privacy and Data During Remote Instruction

This class is being conducted over Ring Central and Moodle. As the host, the instructor may be recording the sessions. The recording feature for others is disabled so that no one else will be able to record the sessions. No recording by other means is permitted. The sessions will be posted on the Moodle class website unless otherwise notified. In case of privacy concerns and individual students wanting not to appear in the recording, the student must contact the Office of Student Affairs and apply for an exemption. Students must complete an Accommodations Request Form, which can be downloaded from http://go.woodbury.edu, and found under "Academic Resources." Accommodations cannot be granted prior to the instructor's receipt of a Notification of Special Needs Release Form from the Disabilities Coordinator. Accommodations are never provided retroactively. If the student prefers to use a pseudonym instead of the real name, please let the instructor know what name will be used so that the instructor knows who you the student is during the session.

Pursuant to the terms of the agreement between the vendors (Moodle and RingCentral) and Woodbury University, the data is used solely for this purpose and the vendor is prohibited from re-disclosing this information. Woodbury University also does not use the data for any other purpose. Recordings will be deleted when no longer necessary. However, the recording may become part of an administrative disciplinary record if misconduct occurs during a video conference.

### Calculation Of Grade

Letter grades are converted to numeric values using the following values:

Letter	GPA	%	Definition
А	4.00-3.84	96-100	Student learning and accomplishment far exceeds published objectives for the course/test/assignment and student work is distinguished consistently by is high level of competency and/or innovation.
A-	3.83-3.50	92-95	
B+	3.49-3.17	88-91	Student learning and accomplishment goes beyond what is expected in the published objectives for the course/test/assignment and student work is frequently characterized by its special depth of understanding, development, and/or innovative experimentation.
В	3.16-2.84	84-87	
В-	2.83-2.50	80-83	Students learning and accomplishment meets all published objectives for the course/test/assignment and the student work demonstrates the expected level of understanding, and application of concepts introduced.
C+	2.49-2.17	76-79	
С	2.16-1.84	72-75	
C-	1.83-1.50	68-71	Student learning and accomplishment based on the published objectives for the course/test/assignment were met with minimum passing achievement.
D+	1.49-1.17	64-67	
D	1.16-0.60	60-63	
F	0.00-0.60	< 60	Student learning and accomplishment based on the published objectives for the course/test/assignment were not sufficiently addressed nor met.

# Woodbury University School of Architecture Graduate Design Studio 4: The Total Building ARCH 589

Semester:Spring 2020Time:Tuesday/Friday 1:15-6:15 PMLocation:TBDInstructor(s):Linda TaalmanOffice Hours:Monday 1-4pm

### **Catalog Description**

Credits 6.00. Students are challenged to synthesize architectural considerations, from the conceptual to the tangible, in the comprehensive design of a building. The studio project grows from a strong theoretical base into a response to the complexities of program and site. Accessibility, environmental performance, and life safety are addressed. Emphasis is placed on the integration of building systems with envelope and structure. Material selection is guided by both climate and context and is sensitive to resource conservation. Prerequisites: Graduate Studio 3

### Learning Outcomes

Upon completion of this course, it is expected that students will be able to:

- Develop a comprehensive design proposal, integrating clear formal and spatial architectural solutions that respond to site and climate, accessibility, and present a fully integrated approach to systems
- Emphasize the design of an architecture through assemblies of materials and systems
- Make connections between building composition, assembly, manufacturing, fabrication and representation
- Design a construct fully articulate of human activity and code compliance, of component parts and whole, and human control and resource management
- Integrate the multitude of systems into the proposed architecture required today to create sustainable building solutions

### NAAB Student Performance Criteria

### A.4 Architectural Design Skills

Ability to effectively use basic formal, organizational and environmental principles and the capacity of each to inform two- and three-dimensional design.

### A.5 Ordering Systems

Ability to apply the fundamentals of both natural and formal ordering systems and the capacity of each to inform two- and three-dimensional design.

### **B.2 Site Design**

Ability to respond to site characteristics including urban context and developmental patterning, historical fabric, soil, topography, climate, building orientation, and watershed in the development of a project design.

#### **B.3 Codes and Regulations**

Ability to design sites, facilities and systems consistent with the principles of lifesafety standards, accessibility standards, and other codes and regulations.

### **B.4 Technical Documentation**

Ability to make technically clear drawings, prepare outline specifications, and construct models illustrating and identifying the assembly of materials, systems, and components appropriate for a building design.

### **B.6 Environmental Systems**

Understanding the principles of environmental systems' design, how systems can vary by geographic region, and the tools used for performance assessment. This must include active and passive heating and cooling, indoor air quality, solar systems, lighting systems, and acoustics.

### **B.7 Building Envelope Systems and Assemblies**

Understanding of the basic principles involved in the appropriate selection and application of building envelope systems relative to fundamental performance, aesthetics, moisture transfer, durability, and energy and material resources.

### **B.8 Building Materials and Assemblies**

Understanding of the basic principles utilized in the appropriate selection of interior and exterior construction materials, finishes, products, components and assemblies based on their inherent performance including environmental impact and reuse.

### **B.9 Building Service Systems**

Understanding of the basic principles and appropriate application and performance of building service systems including mechanical, plumbing, electrical, communication, vertical transportation security, and fire protection systems.

#### **B.10 Financial Considerations**

Understanding of the fundamentals of building costs, which must include project financing methods and feasibility, construction cost estimating, construction scheduling, operational costs, and life-cycle costs.

#### C.2 Integrative Evaluation and Decision-Making Design Process

Ability to demonstrate the skills associated with making integrated decisions across multiple systems and variables in the completion of a design project. This demonstration includes problem identification, setting evaluative criteria, analyzing solutions, and predicting the effectiveness of implementation.

#### C.3 Integrative Design

Ability to make design decisions within a complex architectural project while demonstrating broad integration and consideration of environmental stewardship, technical documentation, accessibility, site conditions, life safety, environmental systems, structural systems, and building envelope systems and assemblies.

### **Course Description**

**HOME NOW**: The 2020 Comprehensive design studio takes on several specific challenges facing us now, the greatest being climate change and the impact that buildings have on their environment and the housing crisis and the ability for architects to provide solutions for the 100% not the 1%. Within this context, the comprehensive studio places particular emphasis on how to design and integrate technology and building systems within our building envelope, with the goal of creating spaces that are highly tuned to their climate, context and social needs. We will question the idea of home and domestic space and redefine how our individual spaces can make a positive impact on our shared communities.



Nagakin Capsule Tower, Kisho Kurakama

2020 is the year that California implements the first net zero energy code requirement at the residential scale, with the plan that by 2030 all buildings in California will be net zero. What this means is that our living spaces, many of which are planned piece by piece by the individual inhabitant, will lead the way towards a sustainable architecture that integrates energy performance with envelope efficiency at the highest level. Dwelling spaces have always played a critical role in the history of architecture, and particularly in California, with architects pioneering new technologies, materials and systems through the most essential space of the home. We will question both the idea of home and the role technology can play in defining how we live and how we build our spaces.

2020 is also a time of crisis for housing globally, and locally within the context of California which is facing a staggering number of homeless and a total lack of affordable housing at the rural, suburban and urban scale. We need fresh solutions. How can architects be a part of the future solutions for our residential spaces at all scales? We will rethink the idea of the house from the inhabitants needs as a 21st century citizen, what is the purpose of our home today? What is the definition of family, neighborhood, community? How do we want to live in the future?

#### Micro-housing

We will use the micro unit as a catalyst for big change. Starting with a single unit and the scale of the inhabitant the studio will innovate solutions for living, energy usage and generation, and material and resource management. The unit will then be tested at a variety of scales- the rural, the suburban and the urban- and combinations- the single unit, the double and the multi.

### Material Research and Prefabrication/Construction

Materials and methods of construction will be questioned as we strive to present new environmental responsible and economical solutions for making space. One of the biggest inhibitors to housing is cost, and this studio strives to provide detailed solutions that are mindful of their environmental and economic feasibility. The studio will research methods of prefabrication, off site fabrication, and construction as a part of this questioning.

As part of the studio rubric we will take on the ACSA 2020 Housing Competition HERE & NOW: A House for the 21st Century. And students will be expected to submit their projects to the competition at the end of the semester.

The studio explores the potential for architects to innovate within a highly defined building envelope. Students will develop designs for micro housing within the context of the Los Angeles region. The studio encourages architecture that retains its own identity while integrating and filtering its environment. There will be an integral focus on passive design and the interface between construction systems developed and environmental systems required for the functionality of the program and achieving net zero energy.

Through the course of the semester, the students will develop the projects through a rigorous methodology of drawings, diagramming and modelling arriving at a highly detailed comprehensive building.

#### Schedule and Deliverables

Part 1: Design and Material Research for a Micro Unit: Historical Precedents, Material Research and Defining the Home Space- due January 28

Part 2: Concept Design for a Prefabricated Micro Unit- due February 11

Part 3: Building Systems Design – due March 7

Part 4: Building Development and Site Integration: Case studies for implementing design and selected systems and materials- due May 1

Assignments and Schedule subject to change or modification throughout the semester. Lectures, guests and field trips will be announced.

### Final Grade Calculation

15%- Part 1: Design and Material Research
15%- Part 2: Concept Design
20%- Part 3: Building Systems Design (Midterm Presentation)
30%- Part 4: Building Development and Site Integration
10%- Final Presentation
10%- Attendance and Participation

### Assignments and Assessment

Students will work through a combination of research & development and design in order to develop highly detailed and inventive building systems with a particular focus on innovative building envelope systems. Students will deploy these systems at a series of scales from small to large. Students will develop detailed drawings and models that they will prototype in digital models, 3d prints and detailed physical models.

Assignments will follow through 4 phases, Research & Development, Concept Design, Systems Design and Building Development and Site Integration. Weekly updates and sub assignments will be given. Students will work primarily as individuals; research may be done in groups.

Criteria for Evaluation

Each Assignment will be evaluated for two core criteria and specific criteria noted below for each part

- 1. Clarity in Representation
- 2. Conceptual Rigor and Development

### Part 1: DESIGN AND MATERIAL RESEARCH due January 28

Activities and Processes: Research of Precedents, Material Research and Defining the Home space through documentation, catalog and interpretation, drawing and digital modeling.

• Students will research the studio topic through a multiprong interpretive lens, critical analysis of precedents, material research, and programmatic research

This assignment consists of 3 key parts

- 1.1. Precedent Research
- 1.2. Material Research
- 1.3. Programmatic Research

• Assessment/grading criteria used to generate grading rubrics.

Criteria below will be used in a matrix that is aligned with each sub assignment

- Precedent Research, Documentation and Interpretation
- Material Research (NAAB B.8)
- Programmatic Research (NAAB C.2)

### Part 2: CONCEPT DESIGN due February 11

Activities and Processes: Development of Concept Design through physical and digital modeling, drawing both orthographic and axonometric, and 3d visualization.

• Students will conceptually develop their material and program research through the development of the envelope into a unit that integrates concepts for passive design

This assignment consists of 2 key parts

2.1. Conceptual development of program as a 3-dimensional space integrating the human scale

2.2. Conceptual envelope design and passive design strategies (daylighting, shading, heat gain, natural ventilation)

• Assessment/grading criteria used to generate grading rubrics.

Criteria below will be used in a matrix that is aligned with each sub assignment

- Develops clear Conceptual strategies in response to material and programmatic research (NAAB, A.5)
- Conceptual Building Envelope responds appropriately to design criteria, develops clear passive design strategies for massing and orientation (NAAB B.6, B.7)
- Integrative design approach- integration of multiple strategies in the creation of a holistic design (NAAB C.3)

### Part 3: SYSTEMS DESIGN due March 6

Activities and Processes: Development of Systems Design through physical and digital modeling, drawing both orthographic and axonometric, amd 3d visualization

 Students will develop their project with consideration primary active systems required for maintaining comfort and performance and balancing energy loads- active system and primary building service systems. The physical integration of these systems within the building envelope is the main objective.

This assignment consists of 2 key parts

3.1. Integration of Active Systems for environmental control (heating, cooling, ventilation, lighting)

3.2. Integration of Building Service Systems (energy systems, mechanical, electrical, plumbing, life safety, AV/Security)

Assessment/grading criteria used to generate grading rubrics.

Criteria below will be used in a matrix that is aligned with each sub assignment

- 1) Develops strategies for integrating active systems for environmental control with the conceptual design (NAAB B.6)
- 2) Develops the project through a clear systems design that successfully integrates the primary building service systems with the conceptual building envelope (NAAB B.7, B.9)
- 3) Clear integrative approach and design decision making (NAAB C.2)
- 4) Integrative design approach- integration of multiple strategies in the creation of a holistic design (NAAB C.3)

### Part 4: BUILDING AND SITE DESIGN due April 14

Activities and Processes: Development of Building Design through drawing both orthographic and axonometric, 3d visualization, digital and physical modeling, and detailed drawings

• Students will develop their project into a fully integrated building and site taking into consideration the primary physical and spatial systems of architecture and enclosure along with the dynamic systems of environmental control, energy, water and resource management

4.1: Site Integration strategies for implementing micro units on multiple sites at multiple scales, massing and orientation in response to site

- 4.2. Networked Systems- strategies for integrating and interconnecting with the larger site
- 4.3. Dynamic Systems and responsive architecture
- 4.3. Final material strategies and feasibility, details and specifications
- Assessment/grading criteria used to generate grading rubrics.

Criteria below will be used in a matrix that is aligned with each sub assignment

- 1) Develops strategies for responding to dynamic forces of time, season and climate and availability of resources
- 2) Develops the project through clear drawings that describe a developed building design successfully integrating all the systems into an architectural project
- Project successfully demonstrates ability to apply local codes and regulations in the building design and the development of plans, sections and elevations and selection of the appropriate building systems (NAAB B.3)
- 4) Detailed technical documentation of the project through technical drawings, specifications and feasibility projections (NAAB B.4, B.10)

### Final Presentation: TBD

Activities and Processes: Development of Building Design through drawing both orthographic and axonometric, 3d visualization, digital and physical modeling, and detailed drawings

• The final presentation compiles and presents the work of the semester alongside a culminating large-scale model. A final model of the proposed project demonstrates the
comprehensive qualities of the project and is intended to articulate the interrelationships between the site and building and the integration of primary and detailed building systems. The final assignment consists of the following parts

- Final Presentation: Assignment 1-4 combined and large-scale sectional model of project
- The final presentation will be a comprehensive evaluation of the work of the entire semester and will be graded on the basis of all Learning Outcomes for this course and NAAB Criteria A.4, A.5, B.2, B.3, B.4, B.6, B.7, B.8, B.9, B.10, C.2, and C.3
- Assessment/grading criteria used to generate grading rubrics.

Criteria below will be used in a matrix that is aligned with each sub assignment

- 1) Develops clear Conceptual strategies in response to site, develops clear passive design strategies of massing, orientation and passive heating and cooling (NAAB A.4, A.5, B.2, C.2)
- 2) Conceptual Building Envelope responds appropriately to site and design criteria, passive design goals (NAAB B.2, B.6, B.7)
- 3) Systems integration of building service systems and active environmental control in the creation of a holistic design (NAAB B.6, B.8, B.9)
- 4) Project successfully demonstrates ability to apply local codes and regulations in the building design and the development of plans, sections and elevations and selection of the appropriate building systems (NAAB B.3)
- 5) Detailed technical documentation of the project through technical drawings (NAAB B.4)
- 6) Clear integrative approach and design decision making (NAAB C.2)
- 7) Develops the project through clear drawings that describe a developed building design successfully integrating all the systems into an architectural project (NAAB C.3)

# Estimate of Costs

Students should expect to expend the necessary resources to produce drafts and final for each assignment. Printing costs are depending upon current pricing and plotting costs established by the university (please see labs) and specific design solutions and material requirements for modeling materials. Estimated printing and model making costs detailed below.

Printing budget: \$500 Model making costs: \$400

There will be field trips during the semester, estimated cost \$100.

## **Attendance Policy**

Students are expected to attend each session of class to not miss key lectures, discussions and feedback. Review of assignments, presentations and critique will be presented during class time. It is not possible to make up missed lectures, discussion or critique. If a presentation is missed the material intended to be presented on that date must be submitted complete to moodle and physically presented at the next class session.

## **Moodle Policy**

Readings and assignments will be posted to moodle. Students are expected to download materials from moodle and be familiar with the material and prepared to discuss these materials in class. Students are responsible for posting all assignments by the assignment due date.

## DEPARTMENT POLICIES AND PROCEDURES

#### **Requirements for Documentation and Archiving**

Every student is responsible for digitally archiving their work. An assignment that has not been digitally archived will be considered incomplete and will not receive credit. Please use the process provided by your instructor to produce a single PDF document for each assignment. Failure to submit the required documentation in usable format may result in a grade reduction in the final grade of the semester. Documentation of the studio work is essential for the NAAB accreditation process and assessment of the architecture program.

The university reserves the right to retain student work for archival purposes. Projects/models, assignments, and exams will be kept at the department's discretion for this purpose. Students will be asked to help with archiving their projects at the end of the semester.

#### Writing Requirements

All written work must meet the standards for English. Poorly written papers may be returned without a grade for revision and resubmission, and may be subject to grade reduction. Students are encouraged to utilize the Woodbury Writing Center.

#### **Studio Culture**

The studio environment is an essential component in learning to become an architect. One goal of the School of Architecture is to create a vibrant, exploratory, safe and respectful learning culture for students. Only through respect between faculty and students, as well as students among themselves, can a healthy educational studio culture be fostered. Students are required to uphold high standards of behavior and academic discipline while in the studio. See the full Studio Guidelines and Studio Culture Policy for more information.

#### School Policy on Social Equity and Diversity

Our mission is to provide an environment where people can learn, teach and work with a shared sense of purpose, core values and respect without bias towards individual beliefs, values and areas of difference. We do this in an effort to create a community that respects and values the full and equal inclusion of its members. Our goal is to provide an environment that is welcoming and inclusive of all.

## Accommodations for students with identified disabilities

Woodbury University is committed to making reasonable accommodations to assist individuals with disabilities in reaching their academic potential. Students desiring accommodations due to a physical, learning or psychological disability must first complete an Accommodations Request Form, which can be downloaded from http://go.woodbury.edu, and found under "Academic Resources." Accommodations cannot be granted prior to the instructor's receipt of a Notification of Special Needs Release Form from the Disabilities Coordinator. Accommodations are never provided retroactively. (For more information, contact the Disabilities Coordinator in the Whitten Center (818) 394-3345.)

#### Academic Honesty

Because the integrity of the academic enterprise of any institution of higher education requires honesty in scholarship and research, academic honesty is required at Woodbury University. Academic integrity is important for two reasons: first, independent and original scholarship ensures that students and scholars derive the most from their educational experience and the pursuit of knowledge. Second, academic dishonesty violates the most fundamental values of a community of scholars and depreciates the achievements of the entire University community. Accordingly, Woodbury University views academic dishonesty as one of the most serious offenses that a member of our community can commit. Adherence to the Academic Honesty Policy reflects the commitment of our community to the ideals of learning, research, and scholarship. See Catalog for the entire Academic Honesty Policy.

#### Grade Requirements

Refer to the Woodbury University catalog for grading standards and policies.

## Environmental Responsibility

Studio projects shall be designed in a socially and environmentally responsible manner. All projects should reduce dependencies on non-renewable resources.

## **Class Attendance**

It is mandatory that students take advantage of all scheduled course time. Regular attendance at EVERY class is expected throughout the duration of the class/studio time. Arrival at the beginning of the class period is required. Lateness or early departure will be considered as an absence. Regular and prompt attendance at all university classes is required. The instructor is not obligated to assign extra work or to prepare additional examinations for classes missed. It is understood that when 15% of the class time has been missed, the student's absence rate is excessive. Each instructor will announce his/her attendance policy in the course syllabus.

#### **Excused Absence**

Students should report any illness or emergency to their course instructor, preferably before missing the class, by emailing the instructor. Written documentation (doctor's note, etc.) is required for an excused absence, and should be submitted to the instructor at the next class meeting. Extended absence due to medical issues, family issues, etc. should be reported to the Dean of Students' office for appropriate documentation.

Students who anticipate absence due to religious observance or similar commitments should speak with their instructor at the start of the term to review all dates in question and develop a plan to meet all course requirements.

#### Email

Students are advised to meet with their instructors during posted office hours. Face-to-face communication in discussing and resolving problems is preferable to email exchanges. Additionally, meetings must be scheduled in advance using email correspondence. Email correspondence must be written in a respectful and professional manner. It is the student's responsibility to consistently check for email.

#### **Grievance Protocol**

Students should use the following protocol for questions, grievances, or general concerns about coursework and the studio environment. Health and safety concerns and emergencies should immediately be directed to campus security (818-252-5208). Academic concerns should be directed first to the student's instructor, and then to the studio coordinator as appropriate. If further consultation is required, the student is advised to meet with the Coordinator and/or the Department Chair.

#### **Class Syllabus and Structure**

While every effort will be made to follow the outline of the published syllabus, course structure and calendar may be changed at the instructor or coordinator's discretion. Announcements will be made if such changes occur. Students who miss class are responsible for tracking any such announcements.

## Calculation Of Grade

Letter grades are converted to numeric values using the following values:

Letter	GPA	%	Definition
A	4.00-3.84	96-100	Student learning and accomplishment far exceeds published objectives for the course/test/assignment and student work is distinguished consistently by is high level of competency and/or innovation.
A-	3.83-3.50	92-95	
B+	3.49-3.17	88-91	Student learning and accomplishment goes beyond what is expected in the published objectives for the course/test/assignment and student work is frequently characterized by its special depth of understanding, development, and/or innovative experimentation.
В	3.16-2.84	84-87	
В-	2.83-2.50	80-83	Students learning and accomplishment meets all published objectives for the course/test/assignment and the student work demonstrates the expected level of understanding, and application of concepts introduced.
C+	2.49-2.17	76-79	
С	2.16-1.84	72-75	
C-	1.83-1.50	68-71	Student learning and accomplishment based on the published objectives for the course/test/assignment were met with minimum passing achievement.
D+	1.49-1.17	64-67	
D	1.16-0.60	60-63	
F	0.00-0.60	< 60	Student learning and accomplishment based on the published objectives for the course/test/assignment were not sufficiently addressed nor met.

# Syllabi B.7 Financial Considerations (B. Arch)



# Professional Practice 3: Documents and Project Administration

**ARCH 450** 

Semester: Spring 2020

Time: Tuesday: 3:50 to 6:20pm

Location: Business Building Room BB210

Instructor: Dawn Brisco, AIA, LEED AP (323-475-8024) <u>dbrisco@nacarchitecture.com</u> Saif Vagh, AIA, DBIA, LEED AP (323-475-8031) <u>svagh@nacarchitecture.com</u>

Office hours: e-mail instructor for appointment

**Required Text and Materials:** Architecture Student's Handbook of Professional Practice – 14th edition or 15th edition

# **Catalog Description**

Design delivery and project and firm management are studied, including understanding the client role in architecture, program preparation, an analysis of documents, services, professional contracts and fees, project budget and cost estimating, global markets, and professional ethics. Lecture.

Three Unit Lecture Prerequisites: ARCH 366, Contemporary Issues and ARCH 448, Professional Practice 2

## Learning Outcomes

Financial Considerations: Understanding of the fundamentals of building costs, such as acquisition costs, project financing and funding, financial feasibility, operational costs, and construction estimating with an emphasis on life-cycle cost accounting.

Client Role in Architecture: Understanding of the responsibility of the architect to elicit, understand, and reconcile the needs of the client, owner, user groups, and the public and community domains.

Project Management: Understanding of the methods for competing for commissions, selecting consultants and assembling teams, and recommending project delivery methods.

Practice Management: Understanding of the basic principles of architectural practice management such as financial management and business planning, time management, risk management, mediation and arbitration, and recognizing trends that affect practice.

Leadership: Understanding of the techniques and skills architects use to work collaboratively in the building design and construction process and on environmental, social, and aesthetic issues in their communities.

Legal Responsibilities: Understanding of the architect's responsibility to the public and the client as determined by registration law, building codes and regulations, professional service contracts, zoning and subdivision ordinances, environmental regulation, and historic preservation and accessibility laws.

Ethics and Professional Judgment: Understanding of the ethical issues involved in the formation of professional judgment regarding social, political and cultural issues in architectural design and practice.

Community and Social Responsibility: Understanding of the architect's responsibility to work in the public interest, to respect historic resources, and to improve the quality of life for local and global neighbors.

# NAAB Student Performance Criteria

## **B.10: Financial Considerations**

Understanding of the fundamentals of building costs, which must include project financing methods and feasibility, construction cost estimating, construction scheduling, operational costs, and life-cycle costs.

## **D.1: Stakeholder Role in Architecture**

Understanding of the relationships among key stakeholders in the design process client, contractor, architect, user groups, local community—and the architect's role to reconcile stakeholder needs.

## **D.2: Project Management**

Understanding of the methods for selecting consultants and assembling teams; identifying work plans, project schedules, and time requirements; and recommending project delivery methods.

## **D.3: Business Practices**

Understanding of the basic principles of a firm's business practices, including financial management and business planning, marketing, organization, and entrepreneurship.

## **D.4: Legal Responsibilities**

Understanding of the architect's responsibility to the public and the client as determined by regulations and legal considerations.

## **D.5: Professional Conduct**

Understanding of the ethical issues involved in the exercise of professional judgment in architectural design and practice and understanding the role of the NCARB Rules of Conduct and the AIA Code of Ethics in defining professional conduct.

## **Woodbury Pillars**

Entrepreneurship

# **Course Description**

Design delivery and project and firm management are studied, including understanding the client role in architecture, program preparation, an analysis of documents, services, professional contracts and fees, project budget and cost estimating, global markets, and professional ethics. Lecture, three hours a week.

# **Schedule and Deliverables**

# **Critical Dates**

01.14.20 – First day of class 01.24.20 – Ass/Drop deadline 02.18.20 – University Enrichment – No Class 03.03.20 – Mid-term 03.10.20 – Spring Break 03.12.20 – Withdrawal deadline 04.28.20 – Last Class 05.05.20 – Final Examination

# **Class Schedule**

*Schedule is subject to change at the discretion of the professor and availability of guest speakers.

DATE	DESCRIPTION	ASSIGNMENT
Class 1	Course Introduction	Case Study Assignment #1
Class 2	Firm Planning	Assignment #A
Class 3	Financial Planning Revenue Plan Overhead/Hourly Rates	Assignment #A DUE
Class 4	Financial Planning Staffing Plan Profit Plan Financial Management Cash vs Accrual Income Statement Balance Sheet	Assignment #B
Class 5	Professional Fees/ Schedule Fee Calculation/ Budget Risk Management/Insurance	Assignment #1 DUE Case Study Assignment #2
	University Enrichment	
Class 6	ARE & NCARB	Assignment #B DUE
Class 7	MID-TERM	
	SPRING BREAK	
Class 8	AIA Documents AIA Document B101	
Class 9	Contract Administration	Assignment #2 Due
Class 10	AIA Documents – G Series	Assignment #C
Class 11	Architecture Practice Act Ethics & Professional Conduct Antitrust	Assignment #C Due Assignment #3
Class 12	Code Analysis	
Class 13	Proforma Marketing	
Class 14	Woodbury Alumni Forum	

Class 15	FINAL-EXAMINATION	Assignment #3 DUE
		Final Examination

## Final Grade Calculation

Activities, Processes, and Assignments	Percentage of Grade	
Attendance/Preparation for class including reading	-	
and participation in class discussions	20%	
Assignments	35%	
Mid Term Examination/Quizzes	25%	
Final Examination/Quizzes	20%	

# **Assignments and Assessment**

Case Study Assignment #1: NAAB D.3: Business Practices Case Study Assignment #2 & #3: NAAB B.10: Financial Considerations, D.1: Stakeholder Role in Architecture, D.2: Project Management Business Plan Assignment #A, #B, #C: D.3: Business Practices

*Additional assignments may be request at the discretion of the professor

# **Class Projects and Assignments Policy**

Class projects and assignments are designed to enhance the lectures and assist in comprehending new material. Projects are due as stated on the assignment. Late projects will be graded down 10% starting at the end of class!

## Estimate of Costs

Estimated cost in addition to the standard studio fees is approximately \$200.

# Reading Assignments

**This class is reading intensive!** Reading assignments should be completed prior to the class where they will be discussed. Information in the reading may not be covered in the lecture, but the material will be on the exams. Reading assignments are listed for each week. **To assist you in keeping up with the reading, all material is subject to quizzes and in class review to ensure comprehension.** 

## **Moodle Policy**

This course will use Moodle to communicate with students and to share relevant information. Once material has been posted to Moodle or sent out via an email through Moodle, the presumption will be that it has been received by every student.

## DEPARTMENT POLICIES AND PROCEDURES

#### **Requirements for Documentation and Archiving**

Each student must submit documentation of the full semester's work at the end of each term, in pdf format. Materials should include research, writing, and design work, including important study models and sketches. Studio faculty will further define how this work should be organized and presented before the end of the semester. Failure to submit the required documentation in usable format may result in a grade reduction in the final grade of the semester. Documentation of the studio work is essential for the NAAB accreditation process and assessment of the architecture program.

The university reserves the right to retain student work for archival purposes. Projects/models, assignments, and exams will be kept at the department's discretion for this purpose. Students will be asked to help with archiving their projects at the end of the semester.

## Writing Requirements

All written work must meet the standards for English. Poorly written papers may be returned without a grade for revision and resubmission, and may be subject to grade reduction. Students are encouraged to utilize the Woodbury Writing Center. Link is <u>here</u>.

## **Studio Culture**

The studio environment is an essential component in learning to become an architect. One goal of the School of Architecture is to create a vibrant, exploratory, safe and respectful learning culture for students. Only through respect between faculty and students, as well as students among themselves, can a healthy educational studio culture be fostered. Students are required to uphold high standards of behavior and academic discipline while in the studio. See the full Studio Guidelines and Studio Culture Policy for more information.

## School Policy on Social Equity and Diversity

Our mission is to provide an environment where people can learn, teach and work with a shared sense of purpose, core values and respect without bias towards individual beliefs, values and areas of difference. We do this in an effort to create a community that respects and values the full and equal inclusion of its members. Our goal is to provide an environment that is welcoming and inclusive of all.

### **Universal Pedagogy**

Woodbury University is committed to making reasonable accommodations to assist individuals with disabilities in reaching their academic potential. Students desiring accommodations due to a physical, learning or psychological disability must first complete an Accommodations Request Form, which can be downloaded <u>here</u>, and found under "Academic Resources." Accommodations cannot be granted prior to the instructor's receipt of a Notification of Special Needs Release Form from the Disabilities Coordinator. Accommodations are never provided retroactively. (For more information, contact the Disabilities Coordinator (818) 394-3345.)

## Academic Honesty

Students are responsible for familiarizing themselves with Woodbury's Student Code of Conduct, which can be found in the Catalog. Academic misconduct, dishonesty, plagiarism, and cheating will not be tolerated and may lead to failure of the course.

#### **Grade Requirements**

Refer to the Woodbury University catalog for grading standards and policies.

#### **Environmental Responsibility**

Studio projects shall be designed in a socially and environmentally responsible manner. All projects should reduce dependencies on non-renewable resources.

## **Class Attendance**

It is mandatory that students take advantage of all scheduled course time. Regular attendance at EVERY class is expected throughout the duration of the class/studio time. Arrival at the beginning of the class period is required. Lateness or early departure will be considered as an absence. 'Regular and prompt attendance at all university classes is required. The instructor is not obligated to assign extra work or to prepare additional examinations for classes missed. It is understood that when 15% of the class time has been missed, the student's absence rate is excessive. Each instructor will announce his/her attendance policy in the course syllabus.

#### **Excused Absence**

Students should report any illness or emergency to their course instructor, preferably before missing the class, by emailing the instructor. Written documentation (doctor's note, etc.) is required for an excused absence, and should be submitted to the instructor at the next class meeting. Extended absence due to medical issues, family issues, etc. should be reported to the Dean of Students' office for appropriate documentation.

Students who anticipate absence due to religious observance or similar commitments should speak with their instructor at the start of the term to review all dates in question and develop a plan to meet all course requirements.

### Email

Students are advised to meet with their instructors during posted office hours. Face-to-face communication in discussing and resolving problems is preferable to email exchanges. Additionally, meetings must be scheduled in advance using email correspondence. Email correspondence must be written in a respectful and professional manner. It is the student's responsibility to consistently check for email.

#### **Grievance Protocol**

Students should use the following protocol for questions, grievances, or general concerns about coursework and the studio environment. Health and safety concerns and emergencies should immediately be directed to campus security (818-252-5208). Academic concerns should be directed first to the student's instructor, and then to the studio coordinator as appropriate. If further consultation is required, the student is advised to meet with the Coordinator and/or the Chair (Marc Neveu, both Undergraduate and Graduate).

## **Class Syllabus and Structure**

While every effort will be made to follow the outline of the published syllabus, course structure and calendar may be changed at the instructor or coordinator's discretion. Announcements will be made if such changes occur. Students who miss class are responsible for tracking any such announcements.

# Calculation Of Grade

Letter grades are converted to numeric values using the following values:

Letter	GPA	%	Definition
А	4.00-3.84	96-100	Student learning and accomplishment far exceeds published objectives for the course/test/assignment and student work is distinguished consistently by is high level of competency and/or innovation.
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В	3.16-2.84	84-87	
B-	2.83-2.50	80-83	Students learning and accomplishment meets all published objectives for the course/test/assignment and the student work demonstrates the expected level of understanding, and application of concepts introduced.
C+	2.49-2.17	76-79	
С	2.16-1.84	72-75	
C-	1.83-1.50	68-71	Student learning and accomplishment based on the published objectives for the course/test/assignment were met with minimum passing achievement.
D+	1.49-1.17	64-67	
D	1.16-0.60	60-63	
F	0.00-0.60	< 60	Student learning and accomplishment based on the published objectives for the course/test/assignment were not sufficiently addressed nor met.

# Syllabi C.1 Collaboration (M. Arch)

# Woodbury University School of Architecture **Practice 1: Architecture Professionalism** ARCH 620

Semester: Fall 2020

Time: Monday/Wednesday 9:00 – 10:15

Location: Virtual <u>https://meetings.ringcentral.com/j/1499791027?pwd=b014UnViekhrenIHdDFGbXRN</u> <u>YzF4QT09</u> Password: 024655

## Instructors: Matthew Boomhower, matthew@southerncrosspc.com

**Office Hours:** By Appointment (requires 24 hours advance notice, email me to schedule)

## Catalog Description

The roles of administration, code, contracts, documents, licensure, management, and policy in alternative and standard practices are delineated as an elaboration of the ethical, financial, and legal responsibilities of the architect.

Three Unit Lecture.

## Learning Outcomes

Minimum to NAAB Criteria:

PC.1 Career Paths: How the program ensures that students understand the paths to becoming licensed as an architect in the United States and the range of available career opportunities that utilize the discipline's skills and knowledge.

Learning Outcome: Examine fundamental definition of the professional role of a licensed architect and the licensing process.

Learning Outcome: Describe project development including financial processes.

Learning Outcome: Evaluate different models of practice in relation to career exploration and the future of practice.

PC.2 Design: How the program instills in students the role of the design process in shaping the built environment and conveys the methods by which design processes integrate multiple factors, in different settings and scales of development, from buildings to cities.

Learning Outcome: Identify architects' leadership roles in the design process including the selection and coordination of allied disciplines, post-occupancy evaluation, and facility management.

PC.6 Leadership and Collaboration: How the program ensures that students understand approaches to leadership in multidisciplinary teams, diverse stakeholder constituents, and dynamic physical and social contexts, and learn how to apply effective collaboration skills to solve complex problems.

Learning Outcome: Examine interdisciplinary collaboration to meet project goals.

PC.8 Social Equity and Inclusion: How the program furthers and deepens students' understanding of diverse cultural and social contexts and helps them translate that understanding into built environments that equitably support and include people of different backgrounds, resources, and abilities.

Learning Outcome: Identify and discuss ethical issues in architectural design and practice.

SC.1 Health, Safety, and Welfare in the Built Environment: How the program ensures that students understand the impact of the built environment on human health, safety, and welfare at multiple scales, from buildings to cities.

Learning Outcome: Analyze regulatory context and creation of pre-design parameters.

SC.2 Professional Practice: How the program ensures that students understand professional ethics, the regulatory requirements, the fundamental business processes relevant to architecture practice in the United States, and the forces influencing change in these subjects.

Learning Outcome: Describe the design development and documentation process

Learning Outcome: Evaluate ethical questions, including social, economic and environmental issues in practice.

# Learning Outcomes

Upon completion of this course, it is expected that students will be able to:

- Review the building codes and legal requirements associated with the practice of architecture.
- Review the conventions of architecture office and project management.
- Review the expectations and steps for architecture licensure.
- Discuss the state of the profession (through a historical contextualization).
- Explore contemporary and alternative models of architecture and affiliated practices.
- Work through basic principles of business, communications, and marketing as enablers of architectural entrepreneurship.
- Assess personal qualifications relative to goals, make a career plan, and assemble a
  professional packet.

The practice of architecture, project and firm management are studied, including understanding the client role in architecture; an analysis of documents, services, professional contracts and fees; project budget, schedule, and cost estimating; markets, firm operations; and professional ethics. Lecture, three hours a week.

Architectural practice can be defined as encompassing the activities of organizing, managing, and documenting the architectural project delivery process as it applies to the modification of the built environment through the design of buildings. This definition is both basic and limited. Architectural practice and practitioners can be, and frequently are, involved in a much broader range of activities. For this course, the narrow definition is intended to maintain a focus on the fundamental aspect of practice: getting your project built. In addition, because architects can practice in a wide variety of jurisdictions, this class will be focused on the practice of architecture in California.

Architectural practice will be examined from three different perspectives.

- I. The professional
- II. The project process
- III. The firm

All three of these aspects of practice are framed by the three legal pillars of practice: contract law, registration laws, and tort law. Because the law guides so much of practice, it will be considered throughout the course just as it impacts the architect: an everyday reality that guides the work of both practice and the practitioner.

# Schedule and Deliverables

See attached.

# Final Grade Calculation

Grades will be assigned based on the following breakdown: Class Participation/Readings 40% Class Projects 50% Comprehensive Final Exam 10%

## **Assignments and Assessment**

Class projects and assignments are designed to enhance the lectures and assist in comprehending new material. Projects are due as stated on the syllabus. Late projects will be graded down 10% per day, starting at the end of class! Assignment #1 – Licensing Paper (5%) Assignment#2 – Zoning/Land Use Paper (20%) Assignment #3 – Zoning Assignment (5%) Assignment #4 – Constraints Assignment (5%) Assignment #5 – Owner, Designer, Builder Exercise (15%) Details and gradig criteria for each assignment will be included with the assignment handout.

# **Estimate of Costs**

\$200

# **Attendance Policy**

This class covers a large amount of material related to the professional world. For this reason, while attendance is essential to each student's comprehension and understanding of the material, students will also be expected to act like professionals regarding their attendance. Attendance will be taken at each class meeting. A decent percentage of your grade in this couse is based on class particicpation, you cannot participate if you do not attend or are regularly late to class.

# **CLASS PARTICIPATION**

The architecture profession is one of collaboration; even solo practitioners must deal with clients, consultants, code officials, and numerous others. In order to maximize the class room experience, each student will be expected to participate in the class. Participation includes engaging in discussions and asking questions about the lecture material and the assigned readings during class, and generally being an active participant in the classroom. Class participation is worth 40% of the final grade in the class, failure to participate will adversely affect the points awarded in this area.

# READING ASSIGNMENTS

**This class is reading intensive!** Reading assignments should be completed prior to the class where they will be discussed. Information in the reading may not be covered in the lecture, but the material will be on the exams. Reading assignments are listed for each week.

## Moodle Policy

I will use Moodle to post materials, send emails, and communicate other important information. It is your responsibility to check Moodle regularly.

## Web Cam Usage

You are expected to "attend" class using a device that allows for both video and two-way audio (speakers and a microphone). I recognize that everyone is taking this course remotely, from a variety of different situations, but turning off your webcam should be the exception and not the rule.

My expectation is that if your webcam is on you are participating and can be called upon.

## DEPARTMENT POLICIES AND PROCEDURES

Requirements for Documentation and Archiving Each student must submit documentation of the full semester's work at the end of each term, in pdf format. Materials should include research, writing, and design work, including important study models and sketches. Studio faculty will further define how this work should be organized and presented before the end of the semester. Failure to submit the required documentation in usable format may result in a grade reduction in the final grade of the semester. Documentation of the studio work is essential for the NAAB accreditation process and assessment of the architecture program.

The university reserves the right to retain student work for archival purposes. Projects/models, assignments, and exams will be kept at the department's discretion for this purpose. Students will be asked to help with archiving their projects at the end of the semester.

## Writing Requirements

All written work must meet the standards for English. Poorly written papers may be returned without a grade for revision and resubmission, and may be subject to grade reduction. Students are encouraged to utilize the Woodbury Writing Center. Link is <u>here</u>.

## **Studio Culture**

The studio environment is an essential component in learning to become an architect. One goal of the School of Architecture is to create a vibrant, exploratory, safe and respectful learning culture for students. Only through respect between faculty and students, as well as students among themselves, can a healthy educational studio culture be fostered. Students are required to uphold high standards of behavior and academic discipline while in the studio. See the full Studio Guidelines and Studio Culture Policy for more information.

## School Policy on Social Equity and Diversity

Our mission is to provide an environment where people can learn, teach and work with a shared sense of purpose, core values and respect without bias towards individual beliefs, values and areas of difference. We do this in an effort to create a community that respects and values the full and equal inclusion of its members. Our goal is to provide an environment that is welcoming and inclusive of all.

### **Universal Pedagogy**

Woodbury University is committed to making reasonable accommodations to assist individuals with disabilities in reaching their academic potential. Students desiring accommodations due to a physical, learning or psychological disability must first complete an Accommodations Request Form, which can be downloaded from http://go.woodbury.edu, and found under "Academic Resources." Accommodations cannot be granted prior to the instructor's receipt of a Notification of Academic Accommodation Plan (NAAP) from the Disabilities Coordinator. Accommodations are never provided retroactively. (For more information, contact the Disabilities Coordinator in the Whitten Center (818) 394-3345.)

#### **Academic Honesty**

Academic integrity is important for two reasons: first, independent and original scholarship ensures that students and scholars derive the most from their educational experience and the pursuit of knowledge. Second, academic dishonesty violates the most fundamental values of a community of scholars and depreciates the achievements of the entire University community. Accordingly, Woodbury University views academic dishonesty as one of the most serious offenses that a member of our community can commit. Adherence to the Academic Honesty Policy reflects the commitment of our community to the ideals of learning, research, and scholarship. See Catalog for the entire Academic Honesty Policy.

#### **Grade Requirements**

Refer to the Woodbury University catalog for grading standards and policies.

## **Environmental Responsibility**

Studio projects shall be designed in a socially and environmentally responsible manner. All projects should reduce dependencies on non-renewable resources.

## **Class Attendance**

It is mandatory that students take advantage of all scheduled course time. Regular attendance at EVERY class is expected throughout the duration of the class/studio time. Arrival at the beginning of the class period is required. Lateness or early departure will be considered as an absence. 'Regular and prompt attendance at all university classes is required. The instructor is not obligated to assign extra work or to prepare additional examinations for classes missed. It is understood that when 15% of the class time has been missed, the student's absence rate is excessive. Each instructor will announce his/her attendance policy in the course syllabus.

## **Excused Absence**

Students should report any illness or emergency to their course instructor, preferably before missing the class, by emailing the instructor. Medical reasons for absences can alternatively be shared with the school nurse and/or the coordinator for the ODAS (disabilities office) who will notify instructor of receipt without revealing specific information.

Students who anticipate absence due to religious observance or similar commitments should speak with their instructor at the start of the term to review all dates in question and develop a plan to meet all course requirements.

#### Email

Students are advised to meet with their instructors during posted office hours. Face-to-face communication in discussing and resolving problems is preferable to email exchanges. Additionally, meetings must be scheduled in advance using email correspondence. Email correspondence must be written in a respectful and professional manner. It is the student's responsibility to consistently check for email. students should use their official woodbury.edu email account.

Due to confidentiality and FERPA requirements all faculty, staff and students, when corresponding through email, must use their university provided Woodbury.edu email accounts. Students are encouraged to check this email address regularly as it is the only email address in which they will receive official course or university information.

## **Grievance Protocol**

Students should use the following protocol for questions, grievances, or general concerns about coursework and the studio environment. Health and safety concerns and emergencies should immediately be directed to campus security (818-252-5208). Academic concerns should be directed first to the student's instructor, and then to the

studio coordinator as appropriate. If further consultation is required, the student is advised to meet with the Coordinator and/or the Chair (Marc Neveu, both Undergraduate and Graduate).

#### **Class Syllabus and Structure**

While every effort will be made to follow the outline of the published syllabus, course structure and calendar may be changed at the instructor or coordinator's discretion. Announcements will be made if such changes occur. Students who miss class are responsible for tracking any such announcements.

## ONLINE COURSE DELIVERY POLICIES AND GUIDELINES

#### Formats of delivery:

Synchronous online: All instruction is provided via the Internet and no face-to-face instruction is required. Faculty and learners meet for regularly scheduled class sessions.

Synchronous activities provide real-time dialogue that can provide the human interaction that is needed among our Woodbury student population.

**asynchronous online**: All instruction is provided via the Internet and no face-to-face instruction is required. Faculty and learners do not meet for regularly scheduled class sessions.

Asynchronous activities allow students with the flexibility to complete certain course work at their own pace, within reason. It also allows students time to think, write, and reflect.

**hybrid with synchronous online:** An instructional delivery method which combines the traditional delivery and the synchronous distance delivery formats.

**hybrid with asynchronous online:** An instructional delivery method which combines the traditional delivery and the synchronous_distance delivery formats.

traditional: This delivery method allows learners and faculty to meet in person or as a group for regularly scheduled class sessions either on campus or at another physical location.

#### Type of course:

Lecture: Refers to the first or primary organization of non-lab class instruction, e.g., a lecture where instructor-based material is presented, or a seminar where material is analyzed and discussed by both students and instructor. Also includes case studies and team-based learning situations. Class meeting time equals 50 minutes per unit per week.

Studio: Refers to situations where the student is engaged in the practice and use of techniques for productions in the areas of architecture, interior design, graphic design, and other design forms. This instruction is used to further advance student's skills in their field of design. The instructor role varies from direct assistance to simple availability for questions and supervision. Class meeting time equals 100 minutes per unit per week.

Laboratory: Refers to the first organization of laboratory class instruction unless one of the other classifications above is more appropriate. Includes both group instruction and individualized instruction such as biology and physics lessons, supervised computing exercises, and hands-on

activities. Class meeting time equals 50 minutes per unit per week.

### Length of sessions:

16-week (Fall/Spring) 7-week intensive format (Fall/Spring) 5-week intensive format (Fall/Spring) 10-week (Summer) 6-week (Summer Super Sessions)

## **Online / Hybrid Requirements**

Students must have basic computer skills, including the use of word processing software, email, and the ability to use internet browsers, such as Safari, Firefox, or Chrome.

All communication by email will be using the assigned woodbury.edu address. Students are required to access this email account on a daily base to ensure timely communication.

Woodbury University's Learning Management System (LMS) of record is Moodle. Moodle should be used to provide students information they need to plan, prepare, and learn in the course. This information includes, but is not limited to: (a) your course syllabus; (b) assignment due dates, instructions, and grading rubrics; (c) course schedule; (d) additional course materials and links, etc.; and/or (e) exams.

Students are responsible for meeting the technical requirements of <u>Moodle</u> and <u>RingCentral</u> and to familiarize themselves with the Moodle Learning Management System and RingCentral Communications System.

IT provides a Moodle (and RingCentral for online delivery) orientation "course" visible to students enrolled in all courses. Students unfamiliar with Moodle are required to review or consult it as needed. This ensures class time is dedicated to course content and not technical tutorials. The syllabus should also indicate how IT will support students' online technical needs.

All required materials, including readings, videos, lectures will be posted on and can be accessed through Moodle.

All assignments have to be submitted through Moodle or <u>OneDrive</u>, depending on file size and faculty instructions.

Exams and quizzes will be administered through either Moodle or <u>Proctorio</u>. Students are required to install the Proctorio Extension in advance.

## Attendance policy

Regular and prompt attendance at all University classes is required. It is the responsibility of the student to adhere to class/studio participation expectations. The instructor is not obligated to assign extra work or to prepare additional content for material missed. It is understood that when 15% of the class time has been missed, the student's absence rate is excessive. The interpretation of this participation policy is left to the discretion of individual faculty.

Attendance of synchronous classes will be measured through attendance of the RingCentral meetings. Students are required to have their camera turned on for the entire class session to be counted as present. If technical or privacy issues prevent the student from having the camera turned on, then the student must contact the Office of Student Affairs and apply for an exemption. Students must complete an Accommodations Request Form, which can be downloaded from http://go.woodbury.edu, and found under "Academic Resources." Accommodations cannot be granted prior to the instructor's receipt of a Notification of Special Needs Release Form from the Disabilities Coordinator. Accommodations are never provided retroactively.

Attendance of asynchronous classes will be measured through the last access to the course in Moodle, participation in quizzes and online discussions, as well as submitted assignments by the required day and time.

## Protecting Privacy and Data During Remote Instruction

This class is being conducted over Ring Central and Moodle. As the host, the instructor may be recording the sessions. The recording feature for others is disabled so that no one else will be able to record the sessions. No recording by other means is permitted. The sessions will be posted on the Moodle class website unless otherwise notified. In case of privacy concerns and individual students wanting not to appear in the recording, the student must contact the Office of Student Affairs and apply for an exemption. Students must complete an Accommodations Request Form, which can be downloaded from http://go.woodbury.edu, and found under "Academic Resources." Accommodations cannot be granted prior to the instructor's receipt of a Notification of Special Needs Release Form from the Disabilities Coordinator. Accommodations are never provided retroactively. If the student prefers to use a pseudonym instead of the real name, please let the instructor know what name will be used so that the instructor knows who you the student is during the session.

Pursuant to the terms of the agreement between the vendors (Moodle and RingCentral) and Woodbury University, the data is used solely for this purpose and the vendor is prohibited from re-disclosing this information. Woodbury University also does not use the data for any other purpose. Recordings will be deleted when no longer necessary. However, the recording may become part of an administrative disciplinary record if misconduct occurs during a video conference.

# Calculation Of Grade

Letter grades are converted to numeric values using the following values:

Letter	GPA	%	Definition
А	4.00-3.84	96-100	Student learning and accomplishment far exceeds published objectives for the course/test/assignment and student work is distinguished consistently by is high level of competency and/or innovation.
A-	3.83-3.50	92-95	
B+	3.49-3.17	88-91	Student learning and accomplishment goes beyond what is expected in the published objectives for the course/test/assignment and student work is frequently characterized by its special depth of understanding, development, and/or innovative experimentation.
В	3.16-2.84	84-87	
В-	2.83-2.50	80-83	Students learning and accomplishment meets all published objectives for the course/test/assignment and the student work demonstrates the expected level of understanding, and application of concepts introduced.
C+	2.49-2.17	76-79	
С	2.16-1.84	72-75	
C-	1.83-1.50	68-71	Student learning and accomplishment based on the published objectives for the course/test/assignment were met with minimum passing achievement.
D+	1.49-1.17	64-67	
D	1.16-0.60	60-63	
F	0.00-0.60	< 60	Student learning and accomplishment based on the published objectives for the course/test/assignment were not sufficiently addressed nor met.

# Syllabi C.5 Practice Management (B.Arch)

Professional Practice 3: Documents and Project Administration ARCH 450 Semester: Spring 2020 Time: Monday 6:30 - 9pm Location: Classroom 1 Instructor: Matthew Boomhower Office hours: By appointment

Required Text: <u>The Architecture Student's Handbook of Professional Practice</u>, AIA, 15th Edition

Professional Practice 101, Second Edition; Andrew Pressman, FAIA

# **Catalog Description**

Design delivery and project and firm management are studied, including understanding the client role in architecture, program preparation, an analysis of documents, services, professional contracts and fees, project budget and cost estimating, global markets, and professional ethics. Lecture.

Three Unit Lecture Prerequisites: ARCH 366, Contemporary Issues and ARCH 448, Professional Practice 2

# Learning Outcomes

Upon completion of this course, it is expected that students will be able to understand and critically analyze:

- the complexities of running an architectural practice,

- the non-design portion of an architectural project, and

- the process for becoming an architect.

# NAAB Student Performance Criteria

# **B.10:** Financial Considerations

Understanding of the fundamentals of building costs, which must include project financing methods and feasibility, construction cost estimating, construction scheduling, operational costs, and life-cycle costs.

# D.1: Stakeholder Role in Architecture

Understanding of the relationships among key stakeholders in the design process—client, contractor, architect, user groups, local community—and the architect's role to reconcile stakeholder needs.

# D.2: Project Management

Understanding of the methods for selecting consultants and assembling teams; identifying work plans, project schedules, and time requirements; and recommending project delivery methods.

# **D.3: Business Practices**

Understanding of the basic principles of a firm's business practices, including financial management and business planning, marketing, organization, and entrepreneurship.

# D.4: Legal Responsibilities

Understanding of the architect's responsibility to the public and the client as determined by regulations and legal considerations.

# **D.5: Professional Conduct**

Understanding of the ethical issues involved in the exercise of professional judgment in architectural design and practice and understanding the role of the NCARB Rules of Conduct and the AIA Code of Ethics in defining professional conduct.

# Woodbury Pillars

Entrepreneurship

# **Course Description**

Architectural practice can be defined as encompassing the activities of organizing, managing, and documenting the architectural project delivery process as it applies to the modification of the built environment through the design of buildings. This definition is both basic and limited. Architectural practice and practitioners can be, and frequently are, involved in a much broader range of activities. For this course the narrow definition is intended to maintain a focus on the fundamental aspect of practice: getting your project built. In addition, because architects can practice in a wide variety of jurisdictions, this class will be focused on the practice of architecture in California.

Architectural practice will be examined from three different perspectives.

- I. The professional
- II. The project process
- III. The firm

These aspects of practice are framed by the three legal pillars of practice: contract law, registration laws, and tort law. Because the law guides so much of practice, it will be considered throughout the course just as it impacts the architect: an everyday reality that guides the work of both practice and the practitioner.

# Schedule and Deliverables - Schedule is subject to change at the discretion of the professor.

# CRITICAL DATES

- 01.21.19 First day of class
- 02.18.19 NO CLASS President's Day
- 03.11.19 NO CLASS Spring Break
- 04.01.19 One chance for Extra Credit
- 05.06.19 Comprehensive Final Exam (Subject to WUSD Final Exam Schedule)

# CLASS SCHEDULE

- 1.13 Class 1 Introduction Review Syllabus, Scope of Course, & Class Projects
- 1.20 MLK Day No Class
- 1.27 Class 2 What is Professional Practice?; Ethics, Professional Standards, & Professional Duties; Licensing Registration & IDP

Readings: Handbook of PP (AIA) Chapter 1 - Professional Life; PP 101 Chapter 1 -Practice, Practice, Practice, Chapter 2 - Do the Right Thing, Chapter 11 - Social Responsibilities; State of California Architects Practice Act: http://www.cab.ca.gov/docs/publications/archive/architects_practice_act_2014.pdf 2.03 Class 3 Construction Contract Types; Construction Process Overview

Readings: Handbook of PP (AIA) Chapter 11 - Contracts and Agreements, Chapter 12 - AIA Documents; PP 101 Chapter 7 - Laws and Order.

2.10 Class 4 Architect-Owner Agreements; Contract Workshop

Readings: Handbook of PP (AIA) Chapter 5 - Project Definition, Chapter 7 - Project Development, Chapter 8 - Design Project Delivery; Moodle: AIA B101 - 2017.

Class Project Assignment #1 to class.

- 2.17 President's Day No Class
- 2.24 Catch-up, Review, & Work on Assignments
- 3.02 Class 5 Conditions of the Contract; Rights, Duties, & Responsibilities Owner, Architect, General Contractor

Readings: Handbook of PP (AIA) Chapter 11 - Types of Agreements, Chapter 12 - AIA Documents; Moodle: AIA A201 - 2017.

Class Project Assignment #1a - Due

Assignment #2 to Class Resume & Cover Letter

Extra Credit to Class Portfolio

- 3.09 Spring Break No Class
- 3.16 Class 6 Contract Modifications & Substitutions; Drawings & Specifications -Organizational Formats

Readings: Handbook of PP (AIA) Chapter 7 - Project Development.

Class Project Assignment #1b - Due

Class Project Assignment #1c - Due

- 3.23 Catch-up, Review, & Work on Assignments
- 3.30 Class 7 Firms Organization & Management: Staff, Fees, Budgets; Business Development

Readings: Handbook of PP (AIA) Chapter 2 - Starting and Organizing a Practice, Chapter 3 - Marketing and Strategic Planning; PP 101 Chapter 3 - The Firm: Commodity and Delight (71-123).

Class Project Assignment #1d - Due

4.06 Class 8 Calculating Fees - or, How to keep the lights on

Readings: Handbook of PP (AIA) Chapter 4 - Running a Practice; PP 101 Chapter 5 - Making a (Financial) Statement (171-190).

Class Project Assignment #1e & 1f - Due

Review Assignment #1 work product

4.13 Class 9 Risk Management Dispute Resolution - mediation, arbitration, & litigation

Readings: Handbook of PP (AIA) Chapter 4 - Running a Practice, Chapter 6 - Common Project Issues; PP 101 Chapter 8 - Risky Business.

Class Project Assignment #2 Due Resume & Cover Letter, Portfolio

- 4.20 Class 10 Project Management, Estimating Project Cost & Project Scheduling
   Readings: Handbook of PP (AIA) Chapter 9 Design Project Management; PP 101 Chapter
   4 Project Management (129- 154).
- 4.27 Class 11 Professional Practice Careers in Architecture, Job Interviews, Job Search Techniques (Guest Lecturer - Stephanie Boomhower, Director of Career Services, GPS, UCSD), Final Exam Review

Readings: Handbook of PP (AIA) Chapter 1 - Professional Life; PP 101 Chapter 1 - Practice, Practice, Practice; State of California Architects Practice Act: http://www.cab.ca.gov/docs/publications/archive/architects_practice_act_2014.pdf

5.04 - Final Exam

# Final Grade Calculation

Attendance 25% Class Participation/Readings 25% Class Projects/Assignments 20% Comprehensive Final Exam 30%

# Class Projects and Assignments Policy

Class projects and assignments are designed to enhance the lectures and assist in comprehending new material. **Projects are due as stated on the syllabus. Late projects will be graded down 10% per day, starting at the end of class!** 

Assignment #1 (multi-part) - Owner, Designer, Builder Exercise (B1, D1, D2) Assignment #2 - Resume & Cover Letter

**Estimate of Costs** Text Books = ~\$150, Other = ~\$10

# Attendance Policy

This class covers a large amount of material related to the professional world. For this reason, while attendance is essential to each student's comprehension and understanding of the material, students will also be expected to act like professionals regarding their attendance. Attendance will be taken at each class meeting. Two absences will result in the loss of 25% (half of the total value) of the final grade related to attendance and class participation (50% of total grade). A third absence will guarantee failure of the course. Students who arrive after class has begun are expected to enter quietly and will need to speak with me after class regarding their late arrival to be added to the role. Two late arrivals will have the same effect on your attendance and class participation grades as an absence. NOTE - leaving the classroom after class has begun may be treated the same as being late.

# **Class Participation**

In order to maximize the class room experience, each student will be expected to participate in the class. Participation includes asking and answering questions about the lecture material or the assigned readings, engaging in discussions during class, and generally being an active participant in the classroom. Class participation is worth 25% of the final grade in the class, failure to participate will adversely affect the points awarded in this area.

# Technology in the Classroom

In recent years, I have noticed a disturbing trend of students using laptops in this class to work on assignments or projects for other classes. I have attempted to police this, but have realized it is a losing battle. Participation in classroom discussions and engagement with the lectures is vital to learning the material and for that reason, the use of laptops, tablets, smartphones, and other "technology" is discouraged during class.

# **Reading Assignments**

This class is reading intensive! Reading assignments should be completed prior to the class where they will be discussed. Information in the reading may not be covered in the lecture, but the material will be on the exams. Reading assignments are listed for each week. To assist you in keeping up with the reading, all material is subject to quizzes and in class review to ensure comprehension.

# Extra Credit for Extra Work Policy

There will be one, and only one, opportunity for "extra credit" in this class. Any student turning in a COPY of their portfolio for review when assigned will have it reviewed and commented on by a career development expert. Your portfolio should be a copy (DO NOT TURN IN ORIGINALS OF PORTFOLIO WORK), clearly marked with your name. Portfolios with comments will be returned to you in class. This is not a required assignment and will NOT adversely affect your final grade; however it is the ONLY time extra credit will be offered.

# Moodle Policy

This course will use Moodle to communicate with students and to share relevant information. Once material has been posted to Moodle or sent out via an email through Moodle, the presumption will be that it has been received by every student.

#### DEPARTMENT POLICIES AND PROCEDURES

## **Requirements for Documentation and Archiving**

Every student is responsible for digitally archiving their work. An assignment that has not been digitally archived will be considered incomplete and will not receive credit. Please use the process provided by your instructor to produce a single PDF document for each assignment. Failure to submit the required documentation in usable format may result in a grade reduction in the final grade of the semester. Documentation of the studio work is essential for the NAAB accreditation process and assessment of the architecture program.

The university reserves the right to retain student work for archival purposes. Projects/models, assignments, and exams will be kept at the department's discretion for this purpose. Students will be asked to help with archiving their projects at the end of the semester.

#### Writing Requirements

All written work must meet the standards for English. Poorly written papers may be returned without a grade for revision and resubmission, and may be subject to grade reduction. Students are encouraged to utilize the Woodbury Writing Center.

#### **Studio Culture**

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#### School Policy on Social Equity and Diversity

Our mission is to provide an environment where people can learn, teach and work with a shared sense of purpose, core values and respect without bias towards individual beliefs, values and areas of difference. We do this in an effort to create a community that respects and values the full and equal inclusion of its members. Our goal is to provide an environment that is welcoming and inclusive of all.

#### Accommodations for students with identified disabilities

Woodbury University is committed to making reasonable accommodations to assist individuals with disabilities in reaching their academic potential. Students desiring accommodations due to a physical, learning or psychological disability must first complete an Accommodations Request Form, which can be downloaded from http://go.woodbury.edu, and found under "Academic Resources." Accommodations cannot be granted prior to the instructor's receipt of a Notification of Special Needs Release Form from the Disabilities Coordinator. Accommodations are never provided retroactively. (For more information, contact the Disabilities Coordinator in the Whitten Center (818) 394-3345.)

#### Academic Honesty

Because the integrity of the academic enterprise of any institution of higher education requires honesty in scholarship and research, academic honesty is required at Woodbury University. Academic integrity is important for two reasons: first, independent and original scholarship ensures that students and scholars derive the most from their educational experience and the pursuit of knowledge. Second, academic dishonesty violates the most fundamental values of a community of scholars and depreciates the achievements of the entire University community. Accordingly, Woodbury University views academic

dishonesty as one of the most serious offenses that a member of our community can commit. Adherence to the Academic Honesty Policy reflects the commitment of our community to the ideals of learning, research, and scholarship. See Catalog for the entire Academic Honesty Policy.

## **Grade Requirements**

Refer to the Woodbury University catalog for grading standards and policies.

#### **Environmental Responsibility**

Studio projects shall be designed in a socially and environmentally responsible manner. All projects should reduce dependencies on non-renewable resources.

#### Class Attendance

It is mandatory that students take advantage of all scheduled course time. Regular attendance at EVERY class is expected throughout the duration of the class/studio time. Arrival at the beginning of the class period is required. Lateness or early departure will be considered as an absence. Regular and prompt attendance at all university classes is required. The instructor is not obligated to assign extra work or to prepare additional examinations for classe missed. It is understood that when 15% of the class time has been missed, the student's absence rate is excessive. Each instructor will announce his/her attendance policy in the course syllabus.

#### Excused Absence

Students should report any illness or emergency to their course instructor, preferably before missing the class, by emailing the instructor. Written documentation (doctor's note, etc.) is required for an excused absence, and should be submitted to the instructor at the next class meeting. Extended absence due to medical issues, family issues, etc. should be reported to the Dean of Students' office for appropriate documentation.

Students who anticipate absence due to religious observance or similar commitments should speak with their instructor at the start of the term to review all dates in question and develop a plan to meet all course requirements.

#### Email

Students are advised to meet with their instructors during posted office hours. Face-to-face communication in discussing and resolving problems is preferable to email exchanges. Additionally, meetings must be scheduled in advance using email correspondence. Email correspondence must be written in a respectful and professional manner. It is the student's responsibility to consistently check for email.

## Grievance Protocol

Students should use the following protocol for questions, grievances, or general concerns about coursework and the studio environment. Health and safety concerns and emergencies should immediately be directed to campus security (818-252-5208). Academic concerns should be directed first to the student's instructor, and then to the studio coordinator as appropriate. If further consultation is required, the student is advised to meet with the Coordinator and/or the Department Chair.

#### **Class Syllabus and Structure**

While every effort will be made to follow the outline of the published syllabus, course structure and calendar may be changed at the instructor or coordinator's discretion. Announcements will be made if such changes occur. Students who miss class are responsible for tracking any such announcements.

## Calculation Of Grade Letter grades are converted to numeric values using the following values:

Letter	GPA	%	Definition
А	4.00-3.84	96-100	Student learning and accomplishment far exceeds published objectives for the course/test/assignment and student work is distinguished consistently by is high level of competency and/or innovation.
A-	3.83-3.50	92-95	
B+	3.49-3.17	88-91	Student learning and accomplishment goes beyond what is expected in the published objectives for the course/test/assignment and student work is frequently characterized by its special depth of understanding, development, and/or innovative experimentation.
В	3.16-2.84	84-87	
В-	2.83-2.50	80-83	Students learning and accomplishment meets all published objectives for the course/test/assignment and the student work demonstrates the expected level of understanding, and application of concepts introduced.
C+	2.49-2.17	76-79	
С	2.16-1.84	72-75	
C-	1.83-1.50	68-71	Student learning and accomplishment based on the published objectives for the course/test/assignment were met with minimum passing achievement.
D+	1.49-1.17	64-67	
D	1.16-0.60	60-63	
F	0.00-0.60	< 60	Student learning and accomplishment based on the published objectives for the course/test/assignment were not sufficiently addressed nor met.