University of Hawai‘i at Mānoa School of Architecture

POLICIES

Academic Year 2013-2014
# TABLE OF CONTENTS

## 1.0 INTRODUCTION

## 2.0 USE OF FACILITIES
- 2.1 Food and Drink
- 2.2 Smoking
- 2.3 Alcoholic Beverages
- 2.4 Noise
- 2.5 Energy Conservation
- 2.6 Building Modification
- 2.7 Studios
- 2.8 Lockers
- 2.9 Digital Fabrication Services (DFS) (RM.207)
- 2.10 Fabrication Workshop (RM. 104)
- 2.11 John and Maria Lynn Reading Room

## 3.0 SAFETY
- 3.1 First Aid
- 3.2 Electrical Use
- 3.3 Toxic Substances
- 3.4 Wheeled Vehicles
- 3.5 Power Tools

## 4.0 SECURITY
- 4.1 Classroom Security
- 4.2 Personal Belongings
- 4.3 Emergency Contact Information

## 5.0 ACADEMIC POLICIES
- 5.1 Professional Fees
- 5.2 Course Requirements
- 5.3 Course Registration
- 5.4 Course Grading Criteria
- 5.5 Campus Policies
- 5.6 Credit Hours and Grades
- 5.7 Final Examinations
- 5.8 D.Arch. Project Guidelines
- 5.9 Design Studio Reviews
- 5.10 Professional Studio and Doctorate Project
- 5.11 Comprehensive Portfolio Review
- 5.12 All-SoA Design Exercises
- 5.13 Notices
- 5.14 Ownership of Student Work
- 5.15 Instructor/Course Evaluation
- 5.16 Computer Ownership
- 5.17 Software

## 6.0 STANDARDS OF CONDUCT
- 6.1 Studio Culture Policy
- 6.2 Disciplinary Procedures
- 6.3 Sexual Harassment
- 6.4 Equal Opportunity/Affirmative Action

## 7.0 NATIONAL ARCHITECTURAL ACCREDITING BOARD
- 7.1 Accreditation Notice
- 7.2 Student Performance Criteria
University of Hawai‘i at Mānoa School of Architecture

POLICIES

Academic Year 2013-2014

1.0 INTRODUCTION

Policies of the University of Hawai‘i at Mānoa (hereinafter “UHM”) and School of Architecture (hereinafter “SoA”) Policies apply to all students of the SoA. Where SoA Policies differ from those of UHM, the more restrictive policies shall prevail. All SoA students are expected to read and abide by all SoA and UHM policies. The SoA Policies are subject to change; students will be notified of such changes by a revision on the School website.

2.0 USE OF FACILITIES

2.1 FOOD AND DRINK
Consumption of food and drinks is not allowed in any SoA classroom, the Digital Fabrication Services facility, Reading Room, and Fabrication Shop except in studio classrooms in a designated area. All food rubbish MUST be removed from all rooms.

2.2 SMOKING
The SoA follows the current UHM Policy and Procedures.

2.3 ALCOHOLIC BEVERAGES
The SoA follows the current UHM Policy and Procedures.

2.4 NOISE
Noise must be kept to a minimum within the SoA. Boisterous activity, construction work, cell phone use in classrooms, music or other noisy activities are strictly prohibited at all times. Electronic devices should be used with personal earphones. Construction using any hand tool or any power tool must be undertaken in the Shop or the loading dock area only.

2.5 ENERGY CONSERVATION
Lights should be on only in occupied classrooms and studio bays. Windows must be closed when the air conditioning is on. Air conditioning is scheduled to be turned on during peak hours only.

2.6 BUILDING MODIFICATION
SoA building assemblies may not be altered or modified in any way without permission from the SoA Administration.

2.7 STUDIOS

2.7.1 Access and Privilege
SoA classrooms designated for Studio use are accessible 24-hours/7-days a week. Students are expected to conduct themselves responsibly. The SoA reserves the right to change the policy regarding studio accessibility at any time.

2.7.2 Furniture
Depending on the availability of furniture and student enrollment, the SoA will provide each student enrolled in a studio with a minimum of one chair and one desk. SoA furniture may be rearranged only with approval of the studio instructor, and may not be removed from the studio. Students may supplement what is provided by the SoA with their own furniture provided there is space available and Instructor and SoA Administration consent has been obtained.
Personal furnishings are subject to the SoA cleanup policy at the end of each semester.

2.7.3 Hanging Drawings
Drawings may be attached only on the demising partitions and the bulletin board surfaces of the studio, with push pins.

2.7.4 Malfunctions
Any malfunction of lights, air conditioning, exit doors, hardware, plumbing, etc. should be reported immediately to the SoA Student Services Office.

2.7.5 Clean Up
a. Each student is responsible to vacate all studio and other SoA spaces and remove all personal belongings no later than the first Sunday following the end of final exam week each semester. Classrooms may only be used by students during the instructional period each semester; each studio classroom may only be used by students currently enrolled in the studio section designated for the classroom. Continuing and registered Doctorate Project students will be permitted to use studio space between instructional periods.

b. SoA staff will inspect the studios after the Sunday following final exam week. The SoA reserves the right to assess a fee for clean up or removal.

c. Any personal belongings left in classrooms or SoA common areas later than the first Sunday following final exam week will be disposed of without notice.

2.8 LOCKERS
Lockers located outside room 210 are for use by students registered in ARCH 101 and ARCH 132. Locker assignments will be made by the Student Services Office on the first day of instruction. Students are to provide their own lock.

At the end of the Fall semester, students can retain their locker if they are continuing with 132 in the Spring. Otherwise, lockers must be vacated by the end of the first day of instruction in the Spring semester. If not vacated, the lock will be removed and contents disposed of.

At the end of the Spring semester, lockers must be cleared and locks removed by Wednesday of final exam week.

Summer storage in the lockers will be available to all students through the AIAS. Please contact an AIAS Officer for details. Summer lockers must be vacated by the end of the day on the first day of instruction in the Fall semester. If not, the lock will be removed and contents disposed of.

Assignment of unused lockers during the Fall and Spring semesters may also be available through the AIAS. Please check with an AIAS Officer for availability.

NOTE: Storage of the following are not allowed: hazardous or flammable materials, including, but not limited to acetone, paint, thinner, lacquer, and gasoline, oily rages, perishable food.

2.9 DIGITAL PRINT LAB (DPL) (RM. 207)

2.9.1 Availability
A limited number of computers are available for use by SoA students under the supervision of the DPL staff for short duration use for scanning and sending files for printing.
2.9.2 **Hours of Operation**

Hours are posted hours on the DPL door. The DPL is closed during scheduled UHM holidays and weekends.

2.9.3 **Costs**

Students are charged nominal fees for use of DPL equipment that may include the following: printer, plotter, large format scanner, laser cutter, and 3D printer. Price lists are available in the DPL.

2.9.4 **Printing, Scanning, and Digital Fabrication Equipment**

Consult with DPL staff for printer and plotter access and procedures.

2.9.5 **Malfunctions**

Students should report any equipment malfunctions to the DPL staff immediately.

2.10 **FABRICATION WORKSHOP (RM. 104)**

2.10.1 **Objectives**

a. To provide hands-on experience in the use of materials and construction methods in order to develop an understanding of their impact on design and the ability to make objects.

b. To provide appropriate knowledge of equipment and facilities in an orderly and safe environment for the above purposes.

2.10.2 **Availability and Usage**

The Fabrication Workshop and equipment are available for use by students that have had an orientation, have signed a Fabrication Workshop Risk and Release Agreement, and only when working under the supervision of the authorized staff or certified faculty. The Fabrication Workshop is to be used for coursework only.

2.10.3 **Hours of Operation**

Hours are subject to adjustments for class time and special projects. Consult the posted hours on the Fabrication Workshop door.

2.10.4 **Policies**

a. All users of the Fabrication Workshop are required to attend a shop orientation session prior to using Fabrication Workshop each semester.

b. The personal safety of each and every individual at the SoA is of primary importance. Safety rules regarding each piece of equipment must be strictly observed and adhered to at all times.

c. At the end of each operation on a machine the user must clean-up each operation/work area.

d. All unused materials must be removed from the Shop.

Additional policies are available from the Fabrication Workshop. All users are required to read and comply with these written policies.

2.11 **JOHN AND MARIA LYNN READING ROOM**

2.11.1 **Availability and Usage**

Students wishing access to the Reading Room must use the regular opening hours.
2.11.2 Regulations
a. Publications may be checked out for one week, through the Reading Room assistant.

b. The room is to be left in the same order as when entered.

c. The computers in the reading room must be used for reading room searches only and not for writing papers or checking e-mail

3.0 SAFETY

3.1 FIRST AID
First-Aid Kits are placed in each studio and the SoA Office, and are to be used only in the case of an emergency.

3.2 ELECTRICAL USE
Use of extension cords that cross pedestrian ways and multiple appliance connections are prohibited.

3.3 TOXIC SUBSTANCES
Spray paint, spray adhesive, and any other toxic substance may only be used in the service driveway area outside the Shop on the ground floor. No use is allowed in the hallways or studios. The SoA follows the current UHM Policy and Procedures regarding the disposal of toxic substances.

3.4 WHEELED VEHICLES
Wheeled vehicles, such as motorcycles, mopeds, skateboards, and bicycles are not allowed in any area within the SoA. Exceptions include: (a) wheelchairs, (b) bicycles to be stored in the bicycle rack on the second floor, (c) compact wheeled vehicles (e.g., skateboards or push scooters) carried and stored away from circulation areas. Vehicles not in compliance with this policy will be ticketed and removed by Security.

3.5 POWER TOOLS
No hand power tools may be operated in the studios, classrooms or corridors. All power tools must be used in or outside Room 104.

4.0 SECURITY

4.1 CLASSROOM SECURITY
Security of the Student Lounge (Rm. 217), and all studios are under the responsibility of the students. At least two people must be in studio during off-peak hours. The last person to leave the studio is responsible to turn off all lights and lock all doors. Sleeping is only permitted if there is at least one other person awake and working in the studio at the time. Studios and classrooms are to remain unlocked during normal business hours, and are to be locked during other hours.

4.2 PERSONAL BELONGINGS
Students are responsible for all personal belongings brought into the SoA. The SoA can assume no responsibility or liability for the theft, loss, or damage to any personal belongings.

4.3 EMERGENCY CONTACT INFORMATION
In the event of an emergency, call UHM security at 956-6911 (66911 on campus phone lines), and if warranted, 911, and contact a member of the SoA Administration or faculty.
5.0 ACADEMIC POLICIES
The School of Architecture has an undergraduate program and a graduate program. The graduate program follows the policies of the UHM Graduate Division as noted in the catalog but it is an independent graduate professional program, not a program administered by the Graduate Division.

5.1 PROFESSIONAL FEE
Architecture students will be assessed a Professional Fee of $500.00 per student per semester (each summer, fall, and spring semester) for the academic year.

5.2 COURSE REQUIREMENTS
Every Architecture Instructor is required to distribute a syllabus during the first week of class. Courses must list required NAAB Student Performance Criteria (grad) and Student Learning Outcomes (undergrad) as well as Grading Criteria.

5.3 COURSE REGISTRATION
Continuing students must register for ALL architecture courses by the first tuition payment deadline. No late registration for any required architecture class is permitted.

5.4 COURSE GRADING CRITERIA
The SoA follows the current UHM Policy and Procedures regarding grading, including when “incomplete” grades may be given and when and why grades may be changed. All work to be graded must be turned in by 4:00 pm of the last day of exam week. No late work can be graded. An “I” Incomplete form, signed by the student and the professor, must be received by the student services office by the last day for grading or no “I” grade is allowed.

5.5 CAMPUS POLICIES
The school supports and follows the “Campus Policies” of the most current UHM Catalog. The class Instructor defines “regular attendance” for the individual class in the syllabus.

5.6 CREDIT HOURS AND GRADES

5.6.1 Courses numbered 100-400 follow “undergraduate” credits and grades policy in the most current UHM catalog.

5.6.2 Courses numbered 500 and 600 follow “graduate” credits and grades policy in the most current UHM catalog.

5.6.3 A student must receive a grade of C or better in any architecture course and must receive a grade of C or better in any general education course that is a prerequisite to an architecture course, including the following: Eng 100, Math 140, Hist 151, Hist 152, Physics 151+ Lab or higher.

5.6.4 Incomplete Grades ("I")
Instructors who record a grade of I for undergraduate courses (100-499) must also record the grade that will replace the I if the work is not made up by the deadline; that grade is computed on the basis of what grades or other evidence the instructors have, averaged together with Fs for all incomplete work (including the final examination, if it is not taken). This alternate grade may be the appropriate letter grade, or if the course was taken under credit/no credit, CR or NC. (The designation W cannot be used as an alternate grade.)

Instructors who record a grade of I for graduate courses (500-799, excluding 700) have the option of recording an alternate grade to replace the I if the work is not made up by the deadline. This includes courses taken for letter grade or for credit/no credit, CR or NC. If the instructor chooses to record an incomplete for a graduate course with no alternate grade, the instructor may (1) allow the grade of I to remain permanently unaltered on the student’s record; (2) submit to
the Office of the Registrar a change of grade form, with the grade computed on the basis of work completed by the deadline noted above; (3) after the deadline for removing the I, at the student's request submit a Change of Grade form to the Office of the Registrar requesting conversion of the I to a grade. Such conversions may be permitted on a case-by-case basis only during the two semesters immediately following the semester in which the I was received. After that period, the I will be permanent and may not be changed.

If work for a course in which an I has been assigned is completed prior to the deadline, the instructor will report a change of grade, taking the completed work into consideration.

5.6.5 Academic Probation, Dismissal, and Suspension
The School of Architecture follows the policies found in the most current UHM catalog for undergraduate and graduate education.

Graduate students are placed on probation for the semester following the semester with a GPA below 3.0. In the second consecutive semester on probation, no architecture classes may be taken, except for architecture classes that have been previously failed. The student with two consecutive semesters on probation shall be dismissed from the program.

5.6.6 GPA Requirements
All undergraduate students must maintain a cumulative 2.0 GPA for all courses. All graduate students must maintain a cumulative 3.0 GPA for their program.

5.7 FINAL EXAMINATIONS
5.7.1 All final examinations for both graduate and undergraduate coursework are given according to the University final exam schedule during final examination week.

5.7.2 No exams may be given during the last two weeks of regular classes.

5.8 D.ARCH PROJECT GUIDELINES
A separate document outlines the requirements and schedule of the D.Arch project.

5.9 DESIGN STUDIO REVIEWS
5.9.1 Public Reviews
All student design work is subject to review and evaluation in a final public review in the week before Final Exams. Students have an opportunity to present their work and receive formal criticism by invited SoA faculty and guests. All students and all interested individuals are welcome and encouraged to attend.

5.9.2 Student Presentation Submission Deadlines
All studio projects prepared for presentation at interim reviews must be completed and submitted to the Instructor 24 hours before the date of the review. All final studio projects prepared for presentation at final reviews must be completed and submitted to the Instructor in accordance with the SoA Final Review Schedule. No time extensions by Instructors are permitted.

5.9.3 Final Review Schedule Posting
A schedule of final reviews will be posted by the SoA each semester.
5.9.4 Final Review
Final reviews are considered as final examinations and must be conducted as scheduled in the SoA Final Review Week according to the printed schedule. No additional studio work after SoA Final Review Week is allowable. Grading of student work at final reviews is conducted by the Instructor.

5.9.5 Final Review Week Attendance
Final reviews are part of the instructional period. Students are expected to attend the final review for their studio as well as the final reviews for other studios as determined by their studio instructor.

5.10 PROFESSIONAL STUDIO AND DOCTORATE PROJECT
No student can proceed to ARCH 546, 547, or 548 when on probation or with any "I" grades.

5.11 COMPREHENSIVE PORTFOLIO REVIEW

5.11.1 Policy Statement
All students enrolled in the Schools undergraduate program must successfully complete a portfolio review process before taking any graduate coursework. Each student in the School of Architecture is required to submit a portfolio for review after the third year studio and before advancement to ARCH 415 studio. Portfolios are due in late April of every year. The submittal dates are printed in the SoA Academic Calendar each year. Late or incomplete portfolios will not be reviewed and will be considered a failure.

See PORTFOLIO GUIDELINES issued for the academic year.

5.12 ALL-SOA DESIGN EXERCISES
The SoA may periodically schedule all-SOA design exercises (e.g., a “charrette” or “esquisse”) that require mandatory participation by all SoA students enrolled in design studio courses. Notification of such events will be made in advance to allow students and faculty to plan accordingly. As stated in the studio course syllabus, Instructors determine the means of evaluation and grading weight and criteria for their studio students for such exercises.

5.13 NOTICES

5.13.1 Academic Information
Students shall be knowledgeable of the various reports in STAR and understand the information contained. Students shall check for their GPA information on regular basis.

5.13.2 E-mail Notices
Important information from the University, the School of Architecture, and your instructors may be sent to your UH Email Account (your UH username@hawaii.edu); therefore, you must check your UH email on a regular basis. Email sent to your UH Email Account is considered an official channel of communication by the University.

5.13.3 Posted Miscellaneous Notices
Miscellaneous notices should be posted on the bulletin board across from room 217. Permission from the SoA Student Services Office is required prior to placing such notices.

5.13.4 All School Meetings
SoA All School Meetings will be conducted when necessary to discuss matters of importance, and may include important registration and advising information.
All students are required to attend All School Meetings and will be held responsible for information given and to comply with any notices conveyed.

5.13.5 **Personal Mail and Phone Messages**
Personal notes and phone messages will not be taken for students by the SoA Office unless it is an emergency.

The SoA is not responsible for student personal mail or other items delivered to the SoA.

5.14 **OWNERSHIP OF STUDENT WORK**

5.14.1 **Intellectual Property Rights**
The SoA follows the current UHM Policy and Procedures.

5.14.2 **SoA Right to Borrow**
The SoA retains the right to borrow student work indefinitely for use in accreditation proceedings, SoA archives, or other purposes. If students wish to retain a record of their work for their own use, they are advised to record, photograph or copy any work prior to submission for grading.

5.15 **INSTRUCTOR/COURSE EVALUATIONS**
eCafe evaluations are for the purpose of providing students an opportunity to give feedback on coursework content and instruction.

5.16 **COMPUTER OWNERSHIP**
Special Requirements: All students are expected to have their own laptop computer for studio and class work available in the classroom and during all studio times.

Recommended laptop computer specifications may be obtained from the SoA IT specialist, Tony Cao.

5.17 **SOFTWARE**
Instructors may require specific software for the satisfactory completion of coursework. Such software purchases are considered an educational cost similar to textbook purchases.

The SoA does not allow or condone the use of illegal software. The SoA will seek to provide licensed software “bundles” at reduced rates, and will notify students if and when they are available.

6.0 **STANDARDS OF CONDUCT**

6.1 **STUDIO CULTURE POLICY**
The Students, Faculty, and Administration support the recommendations of the American Institute of Architecture Students (AIAS) Studio Culture Task Force Report: The of Studio Culture Policy encourages fostering the values of optimism, respect, sharing, engagement, and innovation. The SoA Studio Culture Policy is as follows:

6.1.1 **Intellectual**
   a) An important locus in a professional architecture curriculum and a unique model for learning where knowledge from other curricular areas, outside interests, and experiences are integrated and synthesized into creative and meaningful wholes.
b) A unique setting for learning that encourages reflection, analysis, critical thinking, dialogue, collaboration, risk-taking, innovation, and the free and open exchange of ideas such to develop the discipline of architecture and connect architecture more fully to life.

c) A curricular area that allows exploration of the process of learning and designing as well as the products of design.

d) A setting where pedagogical methods include and connect research, service, design and critique, all of which seek to promote the highest standards of learning and promote positive, constructive, useful, and productive interaction among individuals.

6.1.2 Attitudinal

a) A place that supports and fosters qualities of optimism, tolerance, sharing, and the highest standards of ethical behavior.

b) An environment where healthful work habits are encouraged, and where time management skills can develop in the pursuit of the highest standard of work.

c) A social setting where the acceptance and respect of all individuals regardless of race, gender, creed, age, religion, sexual orientation, socioeconomic background, or physical ability may unfold and be celebrated.

d) A place where a culture of engagement is developed, where individuals can become better citizens, architects, and partners in promoting positive relations among people, and between people and the built and natural environment.

e) A setting which explores and tests collaborative as well as individual learning and that encourages involvement with other academic and professional disciplines such to enrich and connect architecture to the broader society and culture.

f) A course that has an appropriate work load and that balances the work load with other courses and activities, and that encourages excellence in thought and action throughout a life-long educational experience.

6.1.3 Physical

a) A working environment that is safe, secure, functional, healthful, and inspiring.

The SoA commits to periodically revise the Studio Culture Policy as may be appropriate to respond to changed conditions.

6.2 DISCIPLINARY PROCEDURES
The SoA follows the current UHM Policy and Procedures.

6.3 SEXUAL HARASSMENT
The SoA follows the current UHM Policy and Procedures.

6.4 EQUAL OPPORTUNITY/AFFIRMATIVE ACTION
The SoA follows the current UHM Policy and Procedures.
7.0 NATIONAL ARCHITECTURAL ACCREDITING BOARD

7.1 ACCREDITATION NOTICE

The Doctor of Architecture degree program is accredited by the National Architectural Accrediting Board (NAAB).

In the United States, most state registration boards require a degree from an accredited professional degree program as a prerequisite for licensure. The National Architectural Accrediting Board (NAAB), which is the sole agency authorized to accredit U.S. professional degree programs in architecture, recognizes three types of degrees: the Bachelor of Architecture, the Master of Architecture, and the Doctor of Architecture. A program may be granted a 6-year, 3-year, or 2-year term of accreditation, depending on the extent of its conformance with established educational standards.

Doctor of Architecture and Master of Architecture degree programs may consist of a pre-professional undergraduate degree and a professional graduate degree that, when earned sequentially, constitute an accredited professional education. However, the preprofessional degree is not, by itself, recognized as an accredited degree.

University of Hawaii Manoa, School of Architecture, offers the following NAAB-accredited degree program:

Doctor of Architecture
Track I (preprofessional degree in architecture [126/120 credits] + 90 graduate credits)
Track II (non-preprofessional degree [120 credits min.] + 108 graduate credits)

Next accreditation visit: 2018

A copy of the latest NAAB Conditions for Accreditation for Professional Degree Programs in Architecture, and a copy of the NAAB Procedures for Accreditation of Professional Degree Programs in Architecture are available online at www.naab.org. A copy of the SoA Visiting Team Report and SoA Annual Reports for NAAB are available in the SoA Student Services office and can be viewed at any time during normal business hours.

7.2 STUDENT PERFORMANCE CRITERIA

The accredited degree program must demonstrate that each graduate possesses the knowledge and skills defined by the criteria set out below. The knowledge and skills are the minimum for meeting the demands of an internship leading to registration for practice.

The school must provide evidence that its graduates have satisfied each criterion through required coursework. If credits are granted for courses taken at other institutions or online, evidence must be provided that the courses are comparable to those offered in the accredited degree program.

The criteria encompass two levels of accomplishment:

- **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 NAAB establishes performance criteria to help accredited degree programs prepare students for the profession while encouraging educational practices suited to the individual degree program. In addition to assessing whether student performance meets the professional criteria, the visiting team will assess performance in relation to the school’s stated curricular goals and content. While the NAAB stipulates the student performance criteria that must be met, it specifies neither the educational format nor the form of student work that may serve as evidence of having met these criteria. Programs are encouraged to develop unique learning and teaching strategies, methods, and materials to satisfy these criteria. The NAAB encourages innovative methods for satisfying the criteria, provided the school has a formal evaluation process for assessing student achievement of these criteria and documenting the results.

For the purpose of accreditation, graduating students must demonstrate understanding or ability as defined below in the Student Performance Criteria (SPC):

Student Performance Criteria: The SPC are organized into realms to more easily understand the relationships between individual criteria.

**Realm A: Critical Thinking and Representation:**
Architects must have the ability to build abstract relationships and understand the impact of ideas based on research and analysis of multiple theoretical, social, political, economic, cultural and environmental contexts. This ability includes facility with the wider range of media used to think about architecture including writing, investigative skills, speaking, drawing and model making. Students’ learning aspirations include:

- Being broadly educated.
- Valuing lifelong inquisitiveness.
- Communicating graphically in a range of media.
- Recognizing the assessment of evidence.
- Comprehending people, place, and context.
- Recognizing the disparate needs of client, community, and society.

A.1 Communication Skills: Ability to read, write, speak and listen effectively.

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 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.4 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.

A.5 Investigative Skills: Ability to gather, assess, record, apply, and comparatively evaluate relevant information within architectural coursework and design processes.

A.6 Fundamental Design Skills: Ability to effectively use basic architectural and environmental principles in design.

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. 8 Ordering Systems Skills: Understanding of the fundamentals of both natural and formal ordering systems and the capacity of each to inform two- and three-dimensional design.

A. 9 Historical Traditions and Global Culture: Understanding of parallel and divergent canons and traditions of architecture, landscape and urban design including examples of indigenous, vernacular, local, regional, national settings from the Eastern, Western, Northern, and Southern hemispheres in terms of their climatic, ecological, technological, socioeconomic, public health, and cultural factors.

A. 10 Cultural Diversity: Understanding of the diverse needs, values, behavioral norms, physical abilities, and social and spatial patterns that characterize different cultures and individuals and the implication of this diversity on the societal roles and responsibilities of architects.

A.11 Applied Research: Understanding the role of applied research in determining function, form, and systems and their impact on human conditions and behavior.

Realm B: Integrated Building Practices, Technical Skills and Knowledge: Architects are called upon to comprehend the technical aspects of design, systems and materials, and be able to apply that comprehension to their services. Additionally they must appreciate their role in the implementation of design decisions, and the impact of such decisions on the environment. Students learning aspirations include:

• Creating building designs with well-integrated systems.
• Comprehending constructability.
• Incorporating life safety systems.
• Integrating accessibility.
• Applying principles of sustainable design.

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. 3 Sustainability: Ability to design projects that optimize, conserve, or reuse natural and built resources, provide healthful environments for occupants/users, and reduce the environmental impacts of building construction and operations on future generations through means such as carbon-neutral design, bioclimatic design, and energy efficiency.

B. 4 Site Design: Ability to respond to site characteristics such as soil, topography, vegetation, and watershed in the development of a project design.

B. 5 Life Safety: Ability to apply the basic principles of life-safety systems with an emphasis on egress.

B. 6 Comprehensive Design: Ability to produce a comprehensive architectural project that demonstrates each student’s capacity to make design decisions across scales while integrating the following SPC:
A.2. Design Thinking Skills
A.4. Technical Documentation
A.5. Investigative Skills
A.8. Ordering Systems
A.9. Historical Traditions and Global Culture

B.2. Accessibility
B.3. Sustainability
B.4. Site Design
B.5. Life Safety
B.8. Environmental Systems
B.9. Structural Systems

B. 7 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.

B. 8 Environmental Systems: Understanding the principles of environmental systems’ design 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.

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.

B. 10 Building Envelope Systems: Understanding of the basic principles involved in the appropriate application of building envelope systems and associated assemblies relative to fundamental performance, aesthetics, moisture transfer, durability, and energy and material resources.

B. 11 Building Service Systems: Understanding of the basic principles and appropriate application and performance of building service systems such as plumbing, electrical, vertical transportation, security, and fire protection systems.

B. 12 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.

Realm C: Leadership and Practice:
Architects need to manage, advocate, and act legally, ethically and critically for the good of the client, society and the public. This includes collaboration, business, and leadership skills. Student learning aspirations include:

• Knowing societal and professional responsibilities.
• Comprehending the business of building.
• Collaborating and negotiating with clients and consultants in the design process.
• Discerning the diverse roles of architects and those in related disciplines.
• Integrating community service into the practice of architecture.

C. 1 Collaboration: Ability to work in collaboration with others and in multidisciplinary teams to successfully complete design projects.

C. 2 Human Behavior: Understanding of the relationship between human behavior, the natural environment and the design of the built environment.
C. 3 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.

C. 4 Project Management: Understanding of the methods for competing for commissions, selecting consultants and assembling teams, and recommending project delivery methods.

C. 5 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.

C. 6 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.

C. 7 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.

C. 8 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.

C. 9 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.