School of Architecture, Syracuse University

Arc 409: Integrated Building Design Studio Syllabus

Spring 2023:	Slocum Hall Studios
Mode of Instruction:	In person
Instructors	Greg Corso, Liz Kamell, Joel Kerner, Hannibal Newsom (coordinator), Marcos Parga, Richard Rosa, Fei Wang, Cat Wilmes, Abingo Wu (coordinator)
Teaching Assistants:	Angelina Zhang <yzhan375@syr.edu>; Chenhao (Leo) Luo <cluo08@syr.edu>
Meeting Time:	1 - 5 PM DST, Tuesday, Thursday and Friday, Slocum Hall studios
Pre-requisite:	ARC 408 and ARC 423 or coreq. ARC 423

Dennis Adams, still from "Freeload," 200

COURSE DESCRIPTION

ARC 409 is a required course in the studio design sequence that addresses design comprehensively: it acknowledges the order of spatial, tectonic, and climatic systems as essential to architectural culture and design, it focuses on the integration of building systems, materials, and construction processes, and it emphasizes the design strategies that construct a socially and ecologically sustainable built environment, which respond to the civic responsibility, global challenges and opportunities.

INTRODUCTION

ARC 409 addresses the deployment of building systems, materials and construction processes so as to convey coherent values and objectives expressed through architecture (and its effects), and to understand technical and measurable building design and performance. Students should understand the rich relationship between abstract concepts that elevate architecture as a cultural art and the technologies by which it is materialized. It is essential to understand that technical development is not separate from ideation, formal problem solving, or design thinking; rather, all building technologies provide opportunity to extend intention through tectonic and technologic consideration and invention. The pedagogical objective of this integrated architectural design studio is to provide students of architecture with an educational experience that links architectural ideas, spatial thinking, and building technologies as interdependent, mutually supportive, and conceptually expressive.

ARC 409 occupies an important place in the curriculum of the B. Arch studio design sequence; it is both reiterative and introductory. Many of the concepts and techniques acquired in preceding studios and lecture courses will be revisited, both explicitly and implicitly. In ARC 409, as in all studios, knowledge acquired in previous classes and as a result of independent research, will contribute to your emerging, individual identities as architects and designers. A tenet of this studio is

that "integrated design" requires a deep and committed level of technical and statutory knowledge, and that when deployed as integral to design intention, will result in architecturally sophisticated and developed projects not possible in core level studios. For advanced students of architecture, this represents a critical and exciting opportunity to enhance and exercise synthetic design thinking; the manipulation of architectural ideas and strategies that balance interrelated formal, spatial, material, structural, and environmental systems.

An objective of ARC 409 is to address the National Architectural Accreditation Board's (NAAB) "integrated design" curriculum requirement. The NAAB asks that every student demonstrate an ability to use investigative skills, is able to understand and translate precedents, understands and is able to integrate codes and regulations, is able to produce appropriate technical documentation, and understands basic structural systems, building envelopes, and building materials and assembly systems. Students must demonstrate the ability to integrate component systems such that buildings meet health and safety requirements in a culturally and environmentally responsible manner. However complex the NAAB requirements for integrated design may seem, they are in fact a fairly conventional and minimal set of performance requirements and design expectations. This studio seeks to advance projects beyond conventional baseline expectations for building performance.

We live in an age that requires a professional commitment to eliminating environmental harm as the result of design and construction practice. Buildings and their construction together account for 36 percent of global energy use and 39 percent of energy-related carbon dioxide emissions annually, according to the United Nations Environment Program. In the United States, residential and commercial buildings account for 40 percent of energy consumption, according to the U.S. Energy Information Administration.* We must address environmental concerns. How we build what we build when we build is a part of design decision-making. Site development, building performance, building systems, and material choices are not just architectural choices, they are ethical ones. How we address these concerns is part of our social and ecological responsibility as architects and designers. Addressing these environmental concerns aligns with NAAB and Syracuse University's Civic and Global Responsibility (CGR) learning objectives in the course structure.

Though in Arc 409 students are expected to produce projects that comply with applicable building codes, particularly those concerning life safety, egress and accessibility, these parameters should always be understood within the context of larger architectural ambitions and ideas. The implications of emerging techniques in construction and other sectors of industrial manufacturing on building technologies and systems are also explored in the course. In addition, sustainable systems that inform design decisions and affect building tectonics are encouraged. Ultimately, "integrated design" is understood broadly to encompass the processes of design, material and building fabrication and assembly, statutory compliance, and building performance that together illustrate cultural value and design intent.

The non-design courses that are part of this academic curriculum complement and are relevant to work in ARC 409; it is important to understand the relationship between this course and ideas and practices presented in other classes. Concepts introduced and expanded in theory, history, structures, and technology classes will be integrated as projects are developed and may provide conceptual and inspirational sources. Though not explicitly coordinated, the work in this course incorporates all areas of the curriculum and should advance exposure to the discipline - both technical and theoretical. Projects should demonstrate that students have the ability to sustain such content and concepts in the design of compelling architecture.

*Budds, Diana. "How do buildings contribute to climate change?," Curbed, Sept. 19, 2019 (https://www.curbed.com/2019/9/19/20874234/buildings-carbon-emissions-climate-change)π

LEARNING OBJECTIVES

Students will demonstrate that the expression of cultural, political, and societal ambition, responding to global challenges and opportunities, communicated architecturally by the invention of a formal language, is produced by the manipulation of spatial-tectonic relationships, material choices, and the design of building components at all scales.

Students will understand the role of the design process in shaping the built environment and develop the ability to make architectural design decisions that demonstrate the synthesis and thoughtful integration of human, technical, regulatory, and environmental demands and requirements.

Students will develop new design methodologies that allow them to study established and emerging systems, technologies, and regulatory requirements of building construction as well as their underlying principles; and develop skills to effectively and creatively integrate them into architectural designs.

Students will study the tectonic assembly of materials such that they are able to understand with sophistication, the interrelated issues of expression, tactility, performance, and composition, and will deploy integrated design approaches that bring together building systems – including spatial, structural, HVAC, and exterior envelopes – that are often considered separately.

Students will be able to develop and to demonstrate that environmental systems linked to spatial experiences with the goal of increasing the comfort, energy efficiency, and sustainability of built environments are a part of design thinking as well as of their professional contribution and ethical responsibility to the construction of a social and ecologically sustainable built landscape.

Students will be able to demonstrate the relationship between design concepts and basic structural / tectonic solutions.

Students will be able to identify and describe the components of a critical construction detail.

Students will be able to research and explain building design in relation to performative building assemblies that include structure, environmental systems, and materials in support of spatial ambition.

CIVIC AND GLOBAL RESPONSIBILITY (CGR) LEARNING OUTCOMES:

Arc 409 course learning objectives are aligned with the CGR learning outcomes. The CGR competencies are parts of the Syracuse University's Shared Competencies initiatives. They were created by a community of practice with faculty, librarians, and staff from across the University. They promote knowledge, exploration, and analysis of the complexity surrounding interdependent local, national, and global affairs. In addition, they encourage engagement in responsible, collaborative, and inclusive civic and cross-cultural learning, with an emphasis on public, global, and historical issues. The four CGR learning outcomes are:

1. Describe the parts, power dynamics, and interconnections of civic and global systems.
2. Investigate complex civic and global challenges/opportunities and the consequences of interventions.
3. Examine one's civic/global identity and commitment to ethical public action.

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4. Pursue reciprocal and ethical actions to address challenges/opportunities in civic and global systems.

More information about CGR please see: https://effectiveness.syr.edu/shared-competencies/

NAAB CRITERIA

Arc 409 will address the integration of formal-spatial thinking, facade design, structural systems, environmental control systems, accessibility, life safety, and building performance through a collaborative, semester-long design project with accompanying system-based workshops. This addresses NAAB Student Criteria 6: Building Integration

SC.6 Building Integration (ARC409)

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.
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SYRACUSE UNIVERSITY CORE COMPETENCIES FOR ARC 409

SC2 Critical and Creative Thinking Exploration and synthesis of ideas, artifacts, issues, and events to inform and evaluate arguments, develop new insights, and produce creative work. Reflection on, and application of divergent modes of inquiry, analysis, and innovation to research, knowledge, and artistic creation.

SC3 Scientific Inquiry and Research Skills Application of scientific inquiry and problem-solving in various contexts. Analysis of theories, replication of procedures, and rethinking existing frameworks. Supporting arguments through research, data, and quantitative and qualitative evidence that can generate new knowledge

SC5 Communication Skills Effective individual, interpersonal, and collaborative presentation and development of ideas through oral, written, and other forms of expression to inform, persuade, or inspire.

CLASS STRUCTURE

Each section will work independently, but the schedule of formal reviews is shared. The two main reviews, the mid-review and final review, will provide the opportunity for comprehensive input from other SoA faculty and external reviewers. Consultant work sessions will provide students with detailed technical feedback from engineers and consultants in the field. The 'In Progress' round table discussion event following the Arc 409 mid-review will feature a public discussion in the auditorium of the critical issues at play in the development of student projects across all studio sections. This event is intended to foster a sense of community among students and faculty. Lectures throughout the semester will provide additional opportunities for review and new material. The schedule of lectures requires that you develop work outside of class. It is important to be prepared to discuss new work at the beginning of every studio session.

COLLABORATIVE DESIGN

Architecture projects are rarely, if ever, the result of a single individual's work. Even an architect working alone usually collaborates with a builder and their team of subcontractors. More often, large teams of individuals, from architects to consultants to contractors, work together to realize a built project. To this end, and to promote a deeper understanding of the relationship among building technologies and architectural concepts, as well as allow for more architectural development than a typical semester permits, students will work in pairs on a single project. This is an opportunity to learn from peers, to teach what you know well, and to produce more work than a single person reasonably can in 14 weeks. Collaborative processes require discussion among colleagues, strategic thinking, the ability to listen, acknowledge, and expand on promising ideas, and to relinquish individual agendas in service to excellence. This requires time, patience, flexibility, and constructive compromise. To this end, it is critical that everyone is a reliable and hardworking partner. It is likely that you will not be able to anticipate the outcome at the beginning of the project. The goal is to produce a thoughtful work that is richer, more complete, and more interesting than you might be able to produce on your own. It is best to choose a partner whose interests and talents complement your own. Diverse interests and abilities will promote greater breadth and interesting, challenging discussion.

Time management and dependable document management will be either your biggest ally or your biggest foe; it depends on how well collaborative work practices are maintained. The pace of this studio is rapid. To address all of its required learning objectives, you will find that staying on schedule and working fluidly with a partner is essential. Understanding the collaborative process, constructing mutual expectations, and managing an unusual quantity of documents should contribute dramatically and successfully to your work as a team this term.

LECTURES + CONSULTANTS

Throughout the term, both guest experts and course instructors will provide lectures and/or presentations and public discussions that address the pedagogical focus of the studio and other topics related to the integrative nature of architectural production. These opportunities should stimulate inquiry and discussion and will enhance basic analytical, comprehensive approaches, and related representational skills connected to building design. It is important to attend all lectures – both online and in person.

At strategic moments in the semester, structural, mechanical and environmental systems, and building envelope professionals will work with students as projects are being developed. To profit from their expertise, it is essential that on days that they are in class, your work is developed enough for all consultants to respond meaningfully. These opportunities are important to the progress of your work and should inform both conceptual and technical development. In this sense, technical consultants are collaborators and are instrumental to the design process.

The class will receive instruction in common life safety standards and accessibility requirements. Understanding is demonstrated by diagramming systems – and applied in developed plans and building sections. Quizzes may be issued at some in-class lectures as a demonstration that you have understood the material.

ONLINE PROTOCOLS

We will all be in Syracuse and on campus, though consultant workshops and some reviews will take place online. It is always a challenge to navigate multiple environments, but we are all learning to be proficient. Balancing the two environments is getting easier and we need to be prepared for both. We ask for your collaboration and flexibility and understanding.

We are committed to doing our best to ensure that one of the constants in your world will be the quality and sophistication of your educational experience. Online reviews with consultants are designed to take advantage of the expertise of engineers throughout the U.S. who otherwise would not have the opportunity to visit our studios. We are committed to doing everything we can to enhance your intellectual and professional development. The one thing that we insist is that you not sacrifice is the quality and sophistication of your design ideas because you are working online. This is the way that many practices now work.

We recognize that this semester will rely heavily on access to technology. Should you experience anything that interferes with your ability to be productive, please let your professor know immediately. The computer labs will be open and can be used remotely. The School of Architecture is always working to assist students who face technological hardships that impede their ability to work. If you have questions, please ask Andy Molloy (awmolloy@syr.edu) or the faculty for assistance.

Please understand that online meetings are considered public. Appropriate dress is required, and consideration should be taken of your visible background environment.

Instructions from the School of Architecture regarding how to access software licenses are available at https://answers.syr.edu/x/Q41DBg.

HEALTH

We are still in the midst of the COVID-19 pandemic. Staying healthy is a challenge. The faculty is concerned for one another and for you, and we have dedicated substantial attention to your education and to the safety of your work environment. Consult the university guidelines for mask-wearing and testing, get tested when you are asked to and when you do not feel well. We recognize that some of you may occasionally be sick and the same goes for the faculty. When that happens, work with your partners online. We will do our best to also work with you remotely but working online is not the default class delivery mode. This semester, you are expected to be in Slocum Hall when you are in good health.

Mental health and overall well-being are significant predictors of academic success. As such it is essential that during your college experience you develop the skills and resources effectively to navigate stress, anxiety, depression, and other mental health concerns. Please familiarize yourself with the range of resources the Barnes Center provides (https://ese.syr.edu/bewell/) and seek out support for mental health concerns as needed. Counseling services are available 24/7, 365 days, at 315-443-8000. I encourage you to explore the resources available through the Wellness Leadership Institute, https://ese.syr.edu/bewell/wellness-leadership-institute/

STUDIO POLICIES

Architecture is a rigorous and demanding program of study requiring dedication and personal commitment from those who come to learn. By now, students should understand that unlike other fields, the study of design is indeterminate, with few definite boundaries except the amount of time that students are willing and able to commit to it. The reward for dedication is found in the pleasure of creativity, discovery, and personal accomplishment.

Please review all studio policies described in the School of Architecture's Undergraduate Handbook and be respectful about the studio environment, especially during studio hours. In addition to the usual expectations and safety regulations, all university covid rules apply. Pay attention to them so that we all stay healthy.

When in Slocum Hall studios: though the studio environment is relaxed and conducive to social engagement, please respect other students and faculty by using the studio meeting times as productive and creative working sessions – and save socializing (online and in person) for out-of-class time. *That means no email, texts, social media or phone calls, movies, gaming, or online dating during class!*

Eating is not allowed during studio meetings times. If you need to eat, take your food and drink outside of the studio. *Important: Please respect your workspace. Keep the studio clean, free of smelly food, and your belongings off the floor! The cleaning staff do a great job of keeping Slocum Hall from becoming a mess. Give them the respect they deserve by cleaning up after yourselves.*

ATTENDANCE

The structure of the studio sessions will vary. It is your responsibility to be part of the class, to participate in discussions, to be ready for individual/team desk critiques and reviews when they begin, to attend lectures and workshops, and to be ready for formal juries. Your intellectual growth and your work will benefit from it. Working on studio exercises during class hours is expected. As in any academic or professional setting, everyone needs to be (1) on time, (2), prepared, and (3) engaged for the entirety of all classes, including but not limited to lectures, reading discussions, technical workshops, pin-ups, reviews, and studio work days. As upper-level students, you are expected to approach studio class time professionally without the need for reminders from your instructors. This includes appropriate behavior in the physical or virtual classroom; talking on your phone or texting is distracting to your colleagues and to speakers, if they can see you. Students should not sleep in class, and distractions (including watching videos of any kind) that diminish productivity or learning are not permissible behavior. Students are reminded that completing one's own studio work during studio reviews is not only disrespectful to colleagues, but undermines one's own education by missing an essential ingredient of the course.

At online lectures, it is mandatory that you turn your video on. If you turn your video off or you disappear from view, you will be considered absent. At in person lectures, it is expected that you are paying attention to the lecture. That means that all electronic devices will be dedicated to the lecture (for note taking) only.

If you know you will miss a studio, please report it ahead of time to your instructor. Absence for faith observances is permitted, but notification of faith observances must be made as far in advance as possible on Myslice. Notice of absence due to health problems or personal or family circumstances should be made via email as far in advance as possible. If you remain sick for a long period of time, faculty will be notified by the university.

PRESENTATION PREPARATION

By this point in your academic career, you should be familiar with the potential logistic complexity of graphic and modeled presentations. The ability to anticipate and elegantly plan presentations is even more important in a course as demanding as ARC 409. To this end, online presentations are expected to be fully optimized and otherwise prepared in advance for trouble-free pin-ups and reviews. This means knowing how to set up and operate the hardware and software that will be used. It is strongly suggested that you conduct a digital trial run with the software and hardware you intend to use well in advance of important reviews.

ONLINE CLASS ARCHIVES

The Wall: The work of previous semesters will be on exhibit to construct an understanding of the semester's expectations. This semester, professional work will also be exhibited to inspire you to think inventively about methods of representation. "The Wall" images will also be available online.

Detail Archive: In addition to the several online resources that are available through the Syracuse University Libraries, the detail archive is a class resource that will provide examples of a variety of enclosing systems, roof details, foundation details, floor systems and material alternatives.

Working Drawing Archive: On G Drive

IN PROGRESS

The "In Progress" round table discussion is scheduled for the week after the mid-term review. The goal of "In Progress" is to give everyone in the class exposure to what is going on in the year generally. At this event, Arc409 faculty will hold a round-table discussion in the auditorium to discuss emerging issues in ongoing work across all studio sections. More detail will be provided in a separate handout.

Integrated Design Studio Jury and KING + KING PRIZE

At the end of the semester, the Integrated Design Studio Jury and King and King prize will award the best ARC 409 and ARC 607 (Graduate Integrated Design Studio) projects. Two projects from each studio section will be nominated to the competition for prize awards. The jury, tentatively, will be held on May 9th.

EVALUATION

Grades are an assessment of the quality of the work produced. Grades are earned.

General grading criteria are found in this syllabus but matters of fairness and equity in work and evaluation will be addressed on a studio-by-studio basis. Every effort will be made to give timely notification of unsatisfactory work. As is possible, faculty will try to help rectify issues that contribute to poor performance, but it is important to recognize that project development is the responsibility of individual teams. Progress reports will be issued at approximately mid-semester by studio instructors. Midterm grades are advisory and are not necessarily a determinant of final grade; they may change as the term unfolds and as new work is generated. Teammates will not always earn the same grade – contributions to the team will be assessed independently.

The final course grade will be based on more than the sum of the individual exercise grades. Grades reflect the instructor's judgments about individual growth, progress, and overall effort. Final course grades will also reflect the instructor's assessment of the project's success both in terms of the resolution of its technical systems and as a work of architectural design. The following are general evaluative criteria that will be used in assigning letter grades:

A   Performance of superior quality—intellectually, formally, and technically. A grade of "A" requires evidence of ideas and operations that not only address the required criteria, but also demonstrate invention based on critical thinking and creativity.

B   Performance of good quality that satisfies the main goals of the design, analysis, and research exercises. Work of this level should demonstrate an understanding of pertinent issues and should clearly demonstrate a serious commitment to the learning process and a significant gain in knowledge and skills.

C   Performance of below average quality that addresses the goals of the design, analysis, and research exercises, but not thoroughly. Work of this level may lack thorough research and analysis, technical competence, or complete documentation. Although a student receiving a "C" has demonstrated a conscientious effort, little progress in learning and skill development is demonstrated.

D   Performance demonstrates a minimal acceptable level of quantity and quality that addresses the goals of the design, analysis, and research exercises. Work of this level exhibits minimal levels of research and analysis, technical competence, or complete documentation. Although a student receiving a "D" may or may not have demonstrated a conscientious effort, minimal progress in learning and skill development is demonstrated.

F   Performance that is seriously deficient in quality and/or completeness. Given to those projects that do not satisfy basic objectives of the studio assignments, and which reflect a significant, long-term pattern of non-attendance in class and/or lack of effective effort.

FREEDOM OF EXPRESSION

Because this class is committed to free and open inquiry in all matters, it guarantees all members of the class the broadest possible latitude to speak, write, listen, challenge and learn. Except insofar as limitations on that freedom are necessary to the functioning of the class, the faculty and students should fully respect and support the freedom of all students, faculty and staff "to discuss any problem that presents itself," free of interference.

This is not to say that this freedom is absolute. In narrowly-defined circumstances, the instructor may properly restrict expression, for example, that violates the law, is threatening, harassing, or defamatory, or invades substantial privacy or confidentiality interests. Moreover, the class instructor may reasonably regulate the time, place and manner of expression to ensure that it does not disrupt the ordinary activities of the class.

Fundamentally, however, this class is committed to the principle that debate and deliberation will not be restricted because the ideas put forth are thought to be offensive, unwise, immoral, or wrong-headed. It is for the members of the class to make those judgments for themselves. As a corollary to this commitment,

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members of the class must also act in conformity with this principle. Although faculty, students and staff are free to criticize, contest and condemn the views expressed on campus, they may not obstruct, disrupt, or otherwise interfere with the freedom of others to express views they reject or even loathe.

For members of this class, the proper response to ideas they find offensive, unwarranted and dangerous is not interference, obstruction, or suppression. It is, instead, to engage in robust counter-speech that challenges the merits of those ideas and exposes them for what they are. To this end, each of us has a solemn responsibility not only to promote a lively and fearless freedom of debate and deliberation, but also to protect that freedom when others attempt to restrict it.

Without a vibrant commitment to free and open inquiry, a university ceases to be a university. A commitment to this principle lies at the very core of a University's greatness.

-Adapted from the University of Chicago's Statement on Principles of Free Expression

SHOPS

The Slocum shops will be open Monday - Friday, 9-6 pm. A maximum of six students are permitted in the laser lab, so please anticipate your needs and schedule use of the machines. All 3D and laser printing is done through email (with no hands-on access). A few orientation training sessions will be held this semester; if you think you need orientation to use the shop, please consult the shop web page for the session schedule. Shop policies are posted on the website. https://soa.syr.edu/resources/technology/digital-fabrication/

SCHOOL AND UNIVERSITY POLICIES

Stay Safe Pledge

Syracuse University's Stay Safe Pledge reflects the high value that we, as a university community, place on the well-being of our community members. This pledge defines norms for behavior that will promote community health and wellbeing. Students are expected to abide by the University regulations and stay safe pledge, which is updated here, repeated violations will be treated as violations of the Code of Student Conduct and may result in disciplinary action.

Student Work

The School of Architecture reserves the right to use academic work that you complete this semester in subsequent semesters for educational purposes.

After such course has been completed, any further use of student works will meet one of the following conditions: (1) the work will be rendered anonymous through the removal of all personal identification of the work's creator/originator(s); or (2) the creator/originator(s)' written permission will be secured.

Students will be required to upload digital versions of select studio work to the School of Architecture's digital Student Works Archive. Work selection, file-naming protocols and software use will be explained during the semester in time to prepare and upload digital formats of required assets. Submittal of requested materials will be considered to be an integral part of the grading criteria for this course. Non-submittal will result in a semester grade of "F.

Academic Integrity

Syracuse University's Academic Integrity Policy reflects the high value that we, as a university community, place on honesty in academic work. The policy holds students accountable for the integrity of all work they submit and for upholding course-specific, as well as university-wide, academic integrity expectations. The policy governs citation and use of sources, the integrity of work submitted in exams and assignments, and truthfulness in all academic matters, including course attendance and participation. The policy also prohibits students from: 1) submitting the same work in more than one class without receiving advance written authorization from both instructors and, 2) using websites that charge fees or require uploading of course materials to obtain exam solutions or assignments completed by others and present the work as their own. Under the policy, instructors who seek to penalize a student for a suspected violation must first report the violation to the Center for Learning and Student Success (CLASS). Students may not drop or withdraw from courses in which they face a suspected violation. Instructors must wait to assign a final course grade until a suspected violation is reviewed and upheld or overturned. Upholding Academic Integrity includes abiding by instructors' individual course expectations, which may include the protection of their intellectual property. Students should not upload, distribute, or otherwise share instructors' course materials without permission. Students found in violation of the policy are subject to grade sanctions determined by the course instructor and non-grade sanctions determined by the School or College where the course is offered, as described in the Violation and Sanction Classification Rubric. Students are required to read an online summary of the University's academic integrity expectations and provide an electronic signature agreeing to abide by them twice a year during pre-term check-in on MySlice.

The Violation and Sanction Classification Rubric establishes recommended guidelines for the determination of grade penalties by faculty and instructors, while also giving them discretion to select the grade penalty they believe most suitable, including course failure, regardless of violation level. Any established violation in this course may result in course failure regardless of violation level.

All academic integrity expectations that apply to in-person submissions also apply to online submissions. In this course, all material submitted and presented in reviews must be yours alone.

Using websites that charge fees or/and require uploading of course material (e.g. Chegg, Course Hero) to obtain projects completed by others such that projects are presented as your own, violates academ-ic integrity expectations in this course.

For more information and the complete policy see:

http://academicintegrity.syr.edu/

http://class.syr.edu/academic-integrity/policy/

Use of class materials and recordings

Original class materials (handouts, assignments, tests, etc.) and recordings of class sessions are the intellectual property of the course instructor. You may download these materials for your use in this class. However, you may not provide these materials to other parties (e.g., web sites, social media, other students) without

permission. Doing so is a violation of intellectual property law and of the student code of conduct.

Disability accommodations

Syracuse University values diversity and inclusion; we are committed to a climate of mutual respect and full participation. There may be aspects of the instruction or design of this course that result in barriers to your inclusion and full participation in this course. I invite any student to contact me to discuss strategies and/or accommodations (academic adjustments) that may be essential to your success and to collaborate with the Center for Disability Resources (CDR) in this process.

If you would like to discuss disability-accommodations or register with CDR, please visit Center for Disability Resources. Please call (315) 443-4498 or email disabilityresources@syr.edu for more detailed information.

The CDR is responsible for coordinating disability-related academic accommodations and will work with the student to develop an access plan. Since academic accommodations may require early planning and generally are not provided retroactively, please contact CDR as soon as possible to begin this process.

Discrimination or Harrassment

The University does not discriminate and prohibits harassment or discrimination related to any protected category including creed, ethnicity, citizenship, sexual orientation, national origin, sex, gender, pregnan-cy, disability, marital status, age, race, color, veteran status, military status, religion, sexual orientation, domestic violence status, genetic information, gender identity, gender expression or perceived gender. Any complaint of discrimination or harassment related to any of these protected bases should be reported to Sheila Johnson-Willis, the University's Chief Equal Opportunity & Title IX Officer. She is respon-sible for coordinating compliance efforts under various laws including Titles VI, VII, IX and Section 504 of the Rehabilitation Act. She can be contacted at Equal Opportunity, Inclusion, and Resolution Services, 005 Steele Hall, Syracuse University, Syracuse, NY 13244-1120; by email: titleix@syr.edu; or by telephone: 315-443-0211.

Faith Observance

Syracuse University's Religious Observances Policy recognizes the diversity of faiths represented in the campus community and protects the rights of students, faculty, and staff to observe religious holy days according to their traditions. Under the policy, students are given an opportunity to make up any examination, study, or work requirements that may be missed due to a religious observance, provided they notify their instructors no later than the academic drop deadline. For observances occurring before the drop deadline, notification is required at least two academic days in advance. Students may enter their observances in MySlice under Student Services/Enrollment/My Religious Observances/Add a Notification.

Blackboard ARC 409 organization

The syllabus, course calendar, workshop assignments, lecture slides any additional materials, and any notices regarding changes to assignments or calendars (including possible changes to the location and date of reviews and lectures) will be posted in the shared studio folders on Blackboard Individual studios will manage the collection and distribution of work independently, but all students are responsible for understanding how to access Blackboard and the g.syr.edu drive for individual section resources, and are expected to consult both frequently. Instructions for how to access the g.syr.edu drive are here: http://g.syr.edu/. **ARC 409 will be listed on blackboard as an "organization."**

Remember to login using your g.syr.edu address.

University Email Policy

Syracuse University has established email as a primary vehicle for official communication with students, faculty, and staff. Emergency notifications, educational dialog, research, and general business correspondence are all consistently enhanced in institutions of higher learning where email policies exist and are supported by procedures, practice, and culture.

An official email address is established and assigned by Information Technology Services (ITS) for each registered student, as well as for all active faculty and staff members. All University communications sent via email will be sent to this address. Faculty and staff members must use the officially established University email address to communicate with students registered in their classes. Keep in mind that student records sent to a non-syr.edu email address may create a FERPA violation (See the complete policy at Syracuse University Email Policy).

Electronic back-up of student work

Students are obligated to back up digital work. All digital platforms, graphic and otherwise, are prone to crash. It is each student's responsibility to arrange to save their work to a remote hard drive or cloud drive. Computer crashes and platform glitches will not be accepted as an excuse for late or missing submissions. Don't let it be you! BACK UP!

Orange Alert

ORANGE ALERT, Syracuse University's crisis notification system, uses text messages, phone, and email alerts to provide rapid notification and instructions to members of the University community in the event of a crisis in progress. Crises could include an individual who is considered armed and dangerous, a hazardous materials incident, an explosion, or any other event in which there is an immediate threat of physical harm or death to campus community members. We recognize that faculty may consider acti-vated cell phones as an interruption to their class. However, the public safety department recommends that faculty members leave their own cell phones on vibrate in order to receive text messages about a potential emergency situation. It is also recommended that faculty designate several class members to leave their cell phones on vibrate in order to receive notifications in the event of a critical incident. OR-ANGE ALERT contact information for students, faculty, and staff is drawn from the MySlice online informa-tion system; please keep your contact information current.

In the event of an emergency:

Phone emergency line from on-campus: 711

Phone emergency line from off-campus: 315-443-2224

Phone emergency line from cell phone providers ATT/Verizon/Nextel: #78

COURSE BIBLIOGRAPHY

This bibliography is constructed for the class as a place to start research. It is by no means comprehensive and independent research on topics that are specific to your own needs is required. Many of these books will be on reserve in the Architecture Reading Room, some are available digitally through the Syracuse University Libraries, and most are generally available online for sale. Many journals and periodicals are available online.

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https://www.design233.com

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El Croquis Detail (in ARR)

Detail in Contemporary Architecture Detail Inspiration

GA Global Architect GA Documents

The Plan (in ARR)

Journal for Cleaner Production

Tectonica   https://tectonica.archi/

On line Resources

Archello: https://archello.com/projects/detail-drawings/all-categories

American National Standards Institute: https://www.ansi.org/

International Building Code: library.syr.edu >databases > main menu>MADCAD>subscribe books >(International Building Code)

NY State Building Code: (has been superseded by the I.B.C.) The most recent NYS Code was issued in 2010.

Green Building: http://www.journalofgreenbuilding.com

HVAC systems: https://www.lorencook.com/PDFs/Catalogs/Cookbook_Catalog.pdf

American Institute of Steel Construction (AISC) – Specification for Structural Stainless Steel Buildings:
https://www.aisc.org/globalassets/aisc/publications/standards/a360-16-spec-and-commentary_march-2021_linked.pdf

American Institute of Steel Construction (AISC) – Steel Shapes Database: https://www.aisc.org/globalassets/aisc/manual/v15.0-shapes-database/aisc-shapes-database-v15.0.xlsx

Databases

Applied Science & Technology Full Text (material and process oriented, not architect or building based)

> Covering of a wide variety of applied science specialties from acoustics and aeronautics, to neural networks and nuclear & civil engineering. Applied Science & Technology Full Text provides full-text content and in-depth indexing and abstracts from leading trade and industrial journals, professional and technical society journals, specialized subject periodicals, buyers guides, directories and conference proceedings.

Avery Index to Architectural Periodicals (CORE-but Not full-text)

> The Avery Index to Architectural Periodicals indexes more than 2,000 periodicals published worldwide on archaeology, city planning, interior design, and historic preservation, as well as architecture. Coverage is from the 1930s (with selective coverage dating back to the 1860s) to the present. The Avery Index to Architectural Periodicals is updated daily.

Birkhauser Building Types Database (online version of the Birkhauser manuals)

> Provides access to works on architecture design, including building plans and photos, and articles, covering 2002-2016.

DETAIL Inspiration (not a total replica of the print journals)

> Detail Inspiration is a subscription database featuring online access to over 3000 projects
> from the all print versions of Detail, including the German/English/French edition, the newer English edition and Detail Green This resource provides access to the most popular features of the journal issues with photographs and documentation of recent architecture and landscape projects from around the world.

MADCAD (Building codes- NYS and IBC)

> MAD CAD is a subscription based, online reference database that contains cross- referenced collections of building, electrical, mechanical, plumbing, fire, and maintenance codes. The Syracuse University Library subscription provides full-text of the current International and New York State code.

Material Connexion

> Material ConneXion provides a quick global view of the latest innovative and often cutting edge materials. Designed to serve the design disciplines broadly. Material ConneXion offers easy keyword searching options. Users can locate detailed information about specific products and manufacturers. Material ConneXion highlights products that defy conventional notions of strength and weight

SU ARR Materials Collection

> ARR materials samples collection – open 10 am – 4 pm, Monday through Friday http://suarrmaterials.syr.edu/

SoA Working Drawings Collection

> ARR collection of complete working drawing sets.

Tectonica   https://tectonica.archi/

Tutorials   Lynda Software Tutorials: www.lynda.syr.edu

> Autodesk Vasari video channel: http://autodeskvasari.com/video/video

> Autodesk Ecotect Analysis Tutorial - Beginners: http://www.youtube.com/watch?v=qR_qnQih6q0

> Autodesk Ecotect Analysis Basic Tutorial: http://www.youtube.com/watch?v=_ZH3KccqS2Y

> Ecotect Analysis Webinar: http://www.youtube.com/watch?v=8megslL6nkI

> Committee on the Environment (COTE) http://www.aiatopten.org/taxonomy/term/8

MasterWorks   Master Works is an online template that assists in customizing specifications. It is available on three computers in the ARR and all computers in the Slocum Hall computer lab.

Arc 409: Integrated Design Studio Spring 2023

Schedule subject to revision during the semester.
*Indicates pending lecture details

0	Mon.	Tuesday	Wed	Thursday	Friday	Sa/Su
1	1/16	1/17 **Studio Introduction Materials Presentation (Rosa) Slocum Hall 214: 1-3pm**	1/18 Chun Office Hours 10:30am - 12:00pm	1/19**Structures I Lecture (Chun) Slocum Hall 214: 4-5pm**	1/20	1/21,1/22
2	1/23	1/24	1/25 Chun Office Hours 10:30am - 12:00pm	1/26 Chun Office Hours 10:00am - 11:00am	1/27 **Accessibility and Egress Lecture (Kerner) Slocum Hall 214: 1-2pm**	1/28,1/29
3	1/30	1/31	2/2 Chun Office Hours 10:30am - 12:00pm	2/2 **Structures II Lecture (Palacio) Slocum Hall 214: 1-2pm** Chun Office Hours 10:00am - 11:00am	2/3 **HVAC/Sustainability Lecture (Samuelson) Slocum Hall 214: 1-2pm**	2/4,2/5
4	2/6	2/7 **Development Lecture (Ju Bin) Time TBD)***	2/8 **Arc508/998 Reviews No Classes**	2/9 **Envelope + Façade Systems Lecture (Neary) Slocum Hall 214: 1-2pm** Chun Office Hours 10:00am - 11:00am	2/10	2/11,2/12
5	2/13	2/14	2/14 Chun Office Hours 10:30am - 12:00pm	2/16 **Rural Urban Framework (RUF) DEIA Lecture (Time TBD)*** **Arc 409 DEIA Discussion Slocum Hall 214: 1-2pm** Chun Office Hours 10:00am - 11:00am	2/17	2/18,2/19
6	2/20	2/21	2/21 Chun Office Hours 10:30am - 12:00pm	2/23 Chun Office Hours 10:00am - 11:00am	2/24	2/25,2/26
7	2/27	2/28 **Mass Timber (Cabot) Time TBD***	3/1 Chun Office Hours 10:30am - 12:00pm	3/2 Arc 409 Mid Reviews	3/3 Arc 409 Mid Reviews	3/4,3/5
8	3/6	3/7	3/8 Chun Office Hours 10:30am - 12:00pm	3/9 Chun Office Hours 10:00am - 11:00am	3/10 **In-Progress Round Table Slocum Hall 214: 3-5pm**	3/11,3/12
	3/13	3/14	3/15	3/16	3/17	3/18,3/19
9	3/20	3/21	3/22 Chun Office Hours 10:30am - 12:00pm	3/23 **Arc508/998 Reviews No Classes**	3/24	3/25,3/26
10	3/27	3/28	3/29 Chun Office Hours 10:30am - 12:00pm	3/30 Chun Office Hours 10:00am - 11:00am	3/31	4/1,4/2
11	4/3	4/4	4/5 Chun Office Hours 10:30am - 12:00pm	4/6 Chun Office Hours 10:00am - 11:00am	4/7	4/8,4/9
12	4/10	4/11	4/12 Chun Office Hours 10:30am - 12:00pm	4/13 Chun Office Hours 10:00am - 11:00am	4/14	4/15,4/16
13	4/17	4/18	4/19 Chun Office Hours 10:30am - 12:00pm	4/20 Chun Office Hours 10:00am - 11:00am	4/21	4/22,4/23
14	4/24	4/25	4/26 Chun Office Hours 10:30am - 12:00pm	4/27 Chun Office Hours 10:00am - 11:00am	4/28	4/29,4/30
15	5/1 **Arc508/998**	5/2 **Arc508/998 Reviews**	5/3 **Arc508/998 Reviews**	5/4 Arc 409 Final Reviews	5/5 Arc 409 Final Reviews	5/6,5/7
16	5/8	5/9 **Integrated Design Studio Jury and King+King Prize** **Last Day of Classes**				