ARCH 6029: Core II Studio | Architectural Design | Logics of Architectural Design

**School of Architecture | College of Design | Georgia Institute of Technology**

**Professor of Practice David Yocum**

Studio MF 1:10-5:10pm W 1:10-3:10pm

Course Objectives

In every architectural project of merit there are systems created which give logic to the design, construction, and experience of the place. These logics are myriad, including space, scale, dimension, use, structure, fenestration, partition, material, and more. So as to comprehend these logics, we can study canonical examples of architecture; we can take them apart systematically, informed by the context of their historical circumstances and the thematic interests of their authors.

This Core Architectural Design Studio is focused on the discovery of architectural systems through the study of underlying organization and design logics. Small‐scale canonical houses serve as the foundation of analytical study. They provide the opportunity to discover, reveal, document, and represent the systems of design and construction, and the ways in which architects organize the elements of architecture to facilitate architectural proposals and their actualized experiences.

Initial analytical studies ‐ and the rigorous 2D and 3D representation thereof ‐ comprise the first half of the semester.

The second half will use these systems of logic as the conceptual and design foundation to propose projects of similar scale and program.

Schedule and Work

**Logics of Form and Space 5 Weeks**

Analysis of Canonical Houses

Research, documentation, re‐presentation

Analytical definitions of the systems / patterns / elements

Composite Analytical Drawing Panel, Analytical Model

Intervention of Logic

Modification / Extension / Challenge

Intervention Drawing Panel, Intervention Model

Logics of Material and Structure 2 Weeks

Analysis of 4 materials

Concrete, Masonry, Metal, Wood

Using the catalog of the Canonical Houses a resource for specific details

Expositional drawings of materials and how they are deployed

Logics of Assembly 7 Weeks

Introduction of program as a scaffold for a design proposal

Development of systems and materials in the services of spaces and use

Development of a schema rooted in the prior analysis of Form and Space, and Material and Structure

Example Canonical Houses

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1. Adolf Loos | Villa Muller | 1930 | volumes, circulation, materials | \* |
| 2. Pierre Chareau | Maison de Verre | 1932 | structure, elements, systems | \* |
| 3. Frank Lloyd Wright | Jacobs House | 1937 | grain, scale, materials, systems |  |
| 4. Alvar Aalto | Villa Mairea | 1939 | materiality, movement, flow | \* |
| 5. Jean Prouve | Demountable House | 1940 | components, assembly |  |
| 6. Richard Neutra | Kauffman House | 1947 | extensions of space |  |
| 7. Robert Venturi | Vanna Venturi House | 1964 | referential forms, interstitials |  |
| 8. Louis Kahn | Fisher House | 1967 | volumes, intersection, materials |  |

John Hedjuk Bye / Wall House 1973 subject, object, collapse of space

Glenn Murcott Short / Murcott House 1980 pavilion, structure

Rem Koolhaas / OMA Bordeaux House 1998 movement, section, structure

Alvaro Siza Tolo House 2005 stairs, procession

Sui Fujimoto N House 2008 nesting, apertures

\*denotes projects of complexity requiring at least 2 students in collaboration.

Learning Objectives

The specific course objectives include the ability to discern, document, and represent:

Logics of Form and Space

Logics of Material and Structure

Logics of Assembly

Furthermore, this course requires students to then use these logical constructs to propose and create a successful design project, represented by the conventions of the discipline, in written, 2D, 3D and other material.

Studio Expectations, Protocols, and Requirements

Critical Dates and Associated Requirements

All studio days and times as regularly scheduled

Interim Pin‐ups and Reviews as scheduled by the Professor April 19 ‐ 22

Final Review to be Scheduled April 24 ‐ 25

Final Instructional Class Days End‐of‐Year Show Prep Cleaning of Hinman Studios

April 26

Portfolios due for Graduating Students at Noon Faculty Review of Portfolio from 2:00 ‐ 5:00pm

April 26 ‐ 27

Reading Period (No Exams)

End‐of‐Year Show Installation Complete at Midnight April 27 – May 4

Final Exams

April 28

SoA Awards 3:00 ‐ 5:00pm

End of Year Show and Reception

May 5 – 6

Commencement

May 6

End of Term

Studio Culture <http://www.arch.gatech.edu/studentlife/studio>

Students are expected to work in studio, during and between class times.

Each student is responsible for the production of his/her own work. This applies to team projects as well as individual projects. Criticism is central to the learning experience of the studio, whether in one‐on‐one scenarios or informal group discussions. Students are expected to be prepared for desk critiques as instructors will make every attempt to see as many prepared students as possible on a given studio class day. Creative production is a result of both personal initiative and time management.

Master of Architecture Handbook <http://www.arch.gatech.edu/graduate/handbooks/march>

Readings

Required reading materials will either be provided as hard copy or will be placed in a studio folder or uploaded to a common folder. Instructors may make readings available on other electronic sites and may distribute other readings in their section seminars. Reasonable time will be given to complete readings prior to discussion.

Studio Attendance

Attendance is mandatory throughout the studio class periods as well as public lectures. Studio sessions begin promptly and end as determined by each instructor. This may at times fall beyond the 6pm hour, due to the time spent with each student at the desk crit.

Each student is required to attend regularly scheduled class meetings and to participate in all class discussions and group meetings. Each student is also expected to attend scheduled reviews and pinups, and to complete project requirements as per the Schedule. Students are required for the full duration of the scheduled class time. Arriving late, or leaving early, will not be tolerated without prior approval. You must address any scheduling conflicts with your studio instructor at the beginning of the semester.

Studio is a laboratory course. Not all classes will include direct instructional time; independent work will be assigned. There will be periods of studio, and full studio sessions, through the semester where you are expected to attend and to complete your assigned work, without direct instruction. These are independent working periods, often prior to major pin‐ups or reviews, and are critical to the progress of your work.

Missing three studio classes, excused or unexcused, will result in a meeting with your Instructor and the Architecture Program Office to determine a course of action.

Missing more than three studio classes without an approved excuse will result in a letter grade reduction.

Studio Work and Documentation

The work produced in studio is the property of Georgia Tech and may be collected for archival purposes or for representation in the accrediting process. The faculty strongly recommends that each student document his/her work upon completion (electronically) and that they submit a copy of work to their instructor at the end of the semester. Individual instructors may require a digital copy of all final work prior to the issuance of a grade.

# Academic Integrity and Conduct

Georgia Tech aims to cultivate a community based on trust, academic integrity, and honor. Students are expected to act according to the highest ethical standards. All Georgia Tech students should familiarize themselves with and abide by the Georgia Tech Honor Code <http://www.catalog.gatech.edu/rules/18/>.

Student work that presents the ideas or words of others as the student’s own adversely impacts the whole school and may lead to immediate dismissal. Academic dishonesty, including cheating, plagiarism, commissioning academic work by others, or performing academic work on behalf of another student, is strictly prohibited. All persons in the classroom are expected to behave with courtesy towards others and in a way that does not interfere with the regular conduct of the class. Cell phones are to be turned off when students enter the classroom and should remain off for the duration of class: <http://www.catalog.gatech.edu/rules/19/>

# Special Needs

# Any student with a disability, that may require accommodation, should contact Office of Disability Services at 404-894-2563 or visit <http://disabilityservices.gatech.edu> to make an appointment to discuss his or her special needs and obtain an accommodations letter. He or she should also schedule an appointment to speak with the course instructor.

# Emergencies

In case of emergency (e.g., fire, accident, or criminal act), please call the Georgia Tech Police at 404-894-2500. Please note that Perry Minyard, IT Support Administrator for the College of Architecture, is also a firefighter and an Emergency Medical Technician (EMT) certified in performing CPR.

# Ownership

Physical copies of student work submitted to the school to satisfy course requirements—including, but not limited to digital files, papers, drawings, and models—become the property of the school. It is assumed as no obligation to safeguard such materials and may, at its discretion, retain them, return them to the student, or discard them.

# Archiving

In some courses, selected students may be required to submit physical examples of their work or digital examples (on a clearly labeled CD), no later than one week after the end of term, to their instructors or administration for archiving. By enrolling, each student grants a license to reproduce and display his or her work. This is a chance for students to have their work shown online and potentially featured in forthcoming publications.

# College of Design Facility Rules and Guidelines

Please consult the Georgia Tech Student Handbook regarding the use of facilities and all Institute policies. Aerosol sprays of any kind are strictly banned from the studio and surrounding areas. A new spray painting booth is now in operation in the College of Design shop, on the ground floor of the East Architecture Building.

Shop Use: All students using shop facilities must first have completed an orientation. Safety first, always! Noise should be kept to a minimum. Music may be listened to only through headphones, including evenings and weekends.

Studio Housekeeping: Students should feel free to organize their space creatively and expressively, but with respect to others around them. Try to prevent clutter from becoming a nuisance, distraction, or a hazard. The cleaning staff makes every effort to determine what is and is not trash, but their job can be made easier if you keep drawings and models off of the floor.

Correspondence

Your Georgia Tech email address is considered your official address. Please use it and not third‐ party services. Email is a form of official correspondence. Failure on your part to receive email sent, or failure on your part to send email, does not constitute an acceptable excuse for failure

to complete required work or attend required class. When in doubt, contact your Instructor in person, in addition to confirming receipt of any time‐sensitive or urgent correspondence.

Environmental Concerns:

Aerosol sprays of any kind are strictly banned from the studio and surrounding areas. A spray painting booth is in operation in the COA shop, on the lowest floor of COA East. Use no high‐ VOC solvents or other noxious or hazardous chemicals in studio.

Shop Use

All students using shop facilities must first have completed an orientation. Students must comply with all shop procedures or they will lose shop privileges.

Phones and Digital Media in Studio

During class hours, students should cease or strictly limit their use of devices for personal matters and/or entertainment purposes. All electronic devices should be muted. If you must take or initiate a telephone call or other message, step outside of studio.

Music in Studio

Headphones must be used during studio hours. After studio hours, headphones should be used in consideration of others.

Media in Studio

Be judicious of your time and attention, and be considerate of others. Do not view entertainment media during studio hours. Instructors maintain the right to limit or remove media that is distracting to the work of the studio.

Studio Housekeeping

Keep your assigned areas clean of debris and trash. Do not store materials on the floor. Keep all common areas clear of your personal belongings. Please be mindful that you are sharing space with others, and that their personal work environment is as important as your own.

Course Grading

Attendance, participation, timely completion of work, the depth of engagement in studio issues, and the making of progress in your work provides the foundation for your grade. Conceptual rigor, project development and refinement, drawing and model‐making requirements, and craftsmanship all matter greatly and factor in the evaluation of your performance. Grades are earned by you –not given by your Instructor.

A grade of “F” represents “failing” work. This grade reflects a failure to meet the studio requirements, including attendance, minimum requirements concerning presentation and fulfillment of studio requirements. In case of an “F”, the studio will need to be repeated.

A grade of “D” represents “unsatisfactory” work. This grade reflects that you have significant attendance problems, poor studio performance, failure to meet deadlines, non‐fulfillment of the basic requirements of the studio, and/or your project is not plausible. In case of a “D”, the studio will need to be repeated.

A grade of “C” represents “satisfactory” work. This grade reflects that you have met the basic requirements of the studio, and your project is plausible, even if substantially under‐developed.

A grade of “B” represents “good” work. This grade reflects that you have met the full requirements of the studio, and that your project is developed to the point where evaluation can be made relative to the studio’s essential themes and criteria.

A grade of “A” represents “excellent” work. This grade reflects that your project represents both a clear understanding of studio themes and criteria, and is a self‐motivated exploration beyond the basic course requirements. Projects that receive grades of “A” are exemplary projects in terms of concept, production, and craft.

Midterm grades will be assigned following the Midterm Review. Receipt of a passing grade at Midterm does not guarantee a passing Final grade. Before initiating any grade dispute, contact the Program Office, and review Institute policies.

General Institute Standards and Guidelines

Course Catalog: <http://www.catalog.gatech.edu/index.php>

Counseling: <http://www.counseling.gatech.edu/>

Rules and Regulations: <http://www.catalog.gatech.edu/rules/1.php>

Disabled Assistance: <http://www.catalog.gatech.edu/genregulations/assist.php>

<http://disabilityservices.gatech.edu/>

Academic Honor Code: <http://www.honor.gatech.edu/content/2/the>‐honor‐code Code of Conduct: [http://www.policylibrary.gatech.edu/student‐a](http://www.policylibrary.gatech.edu/student)ffairs/code‐ conduct

Student Bill of Rights: <http://www.catalog.gatech.edu/rules/22.php> Please note that GT is a Tobacco Free Campus.

END