

The University of Texas at Arlington
CAPPA - School of Architecture

Instructor: Dennis A. Chiessa
Office: CAPPA Building
Office Phone: 817.272.2801
Email Address: chiessa@uta.edu
Office Hours: MWTH by appointment

Syllabus: Arch 5672 001 Advanced Design Studio - Comprehensive
Location: Arch 335
Meeting Time: MWTH 2:00 PM – 6:50 PM

Description of Course Content:

ARCH 5672 Comprehensive Design Studio

Comprehensive studio course emphasizing the analysis and design of building aggregations within the urban context. May be repeated for credit.

Pedagogy:

Teaching architecture principles focuses on developing the student's ability to understand what an architectural idea is, how it is developed, and how to implement it into a design problem. The design process is explored through experimentation. Lectures and design exercises emphasize the development of an architectural idea.

Student Performance Criteria:

Student learning objectives are coordinated to reflect the National Architectural Accreditation Board (NAAB) Student Performance Criteria (refer SOA website). The criteria for ARCH 5672 encompasses two levels of accomplishment as follows:

- 1. Ability:** Skill in using specific information to accomplish a task in correctly selecting the appropriate information, and in applying it to the solution of a specific problem.
 - A.1 Professional Communication Skills:** Ability to write and speak effectively and use representation media appropriate for both within the profession and with the general public.
 - A.2 Design Thinking Skills:** Ability to raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, reach well-reasoned conclusions, and test alternative outcomes against relevant criteria and standards.
 - A.3 Investigative Skills:** Ability to gather, assess, record, and comparatively evaluate relevant information and performance in order to support conclusions related to a specific project or assignment.
 - A.4 Architectural Design Skills:** Ability to effectively use basic formal, organizational and environmental principles and the capacity of each to inform two and three dimensional design.

A.5 Ordering Systems: Ability to apply the fundamentals of both natural and formal ordering systems and the capacity of each to inform two and three dimensional design.

A.6 Use of Precedents: Ability to examine and comprehend the fundamental principles present in relevant precedents and to make informed choices about the incorporation of such principles into architecture and urban design projects.

B.1 Pre-Design: Ability to prepare a comprehensive program for an architectural project that includes an assessment of client and user needs; an inventory of spaces and their requirements; an analysis of site conditions (including existing buildings); a review of the relevant building codes and standards, including relevant sustainability requirements, and an assessment of their implications for the project; and a definition of site selection and design assessment criteria.

B.2 Site Design: Ability to respond to the site characteristics, including urban context and developmental patterning, historical fabric, soil, topography, ecology, climate, and building orientation, in the development of a project design.

B.3 Codes and Regulations: Ability to design sites, facilities, and systems that are responsive to relevant codes and regulations, and include the principles of life-safety and accessibility standards.

B.4 Technical Documentation: Ability to make technically clear drawings, prepare outline specifications, and construct models illustrating and identifying the assembly of materials, systems, and components appropriate for a building design.

B.5 Structural Systems: Ability to demonstrate the basic principles of structural systems and their ability to withstand gravitational, seismic, and lateral forces, as well as the selection and application of the appropriate structural system.

B.6 Environmental Systems: Ability to demonstrate the principles of environmental systems design, how design criteria can vary by geographic region, and the tools used for performance assessment. This demonstration must include active and passive heating and cooling, solar geometry, daylighting, natural ventilation, indoor air quality, solar systems, lighting systems, and acoustics.

B.7 Building envelope Systems and Assemblies: Understanding of the basic principles involved in the appropriate selection and application of building envelope systems relative to fundamental performance, aesthetics, moisture transfer, durability, and energy and material resources.

B.8 Building Materials and Assemblies: Understanding of the basic principles used in the appropriate selection of interior and exterior construction materials, finishes, products, components, and assemblies based on their inherent performance, including environmental impact and reuse.

B.9 Building Service Systems: Understanding of the basic principles and appropriate application and performance of building service systems, including lighting, mechanical, plumbing, electrical, communication, vertical transportation, security, and fire protection systems.

- 2. Understanding:** The capacities to classify, compare, summarize, explain and / or interpret information.

A.7 History and Global Culture: Understanding of the parallel and divergent histories of architecture and the cultural norms of a variety of indigenous, vernacular, local, and regional settings in terms of their political, economic, social, ecological, and technological factors.

A.8 Cultural Diversity + Equity: Understanding of the diverse needs, values, behavioral norms, physical abilities, and social and spatial patterns that characterize different cultures and individuals and the responsibility of the architect to ensure equity of access to sites, buildings, and structures.

B.10 Financial Considerations: Understanding of the fundamentals of building costs, which must include project financing methods and feasibility, construction cost estimating, construction scheduling, operational costs, and life-cycle costs.

C.1 Research: Understanding of the theoretical and applied research methodologies and practices used during the design process.

C.2 Integrated Evaluations and Decision-Making Design Process: Ability to demonstrate the skills associated with making integrated decisions across multiple systems and variables in the completion of a design project. This demonstration includes problem identification, setting evaluative criteria, analyzing solutions, and predicting the effectiveness of implementation.

C.3 Integrative Design: Ability to make design decisions within a complex architectural project while demonstrating broad integration and consideration of environmental stewardship, technical documentation, accessibility, site conditions, life safety, environmental systems, structural systems, and building envelope systems and assemblies.

Requirements:

Restricted to Graduate Architecture and Landscape Architecture majors and certificate programs.

Recommended Texts:

Building Construction Illustrated by Francis Ching

Building Codes Illustrated by Francis Ching

The Landscape Urbanism Reader – Edited by Charles Waldheim

Descriptions of major assignments and examinations:

There will be one major project – North Side Branch Library in Fort Worth. The project will be broken down into the following phases (below), usually marked by pinups but not necessarily in a linear process. Depending on each student's conceptual inclinations and interests, it is expected that students jump back and forth to test, revise, update and develop all aspects of the project.

1. Precedent presentations – each student will be assigned two precedent buildings to analyze and present to the class.
2. Site Analysis.
3. Conceptual Design
4. Integration of building systems
5. Final presentation

6. Final Dossier

There will be no exams in this section; however, quizzes may be given periodically covering material presented in lectures and assignments. As quizzes may be given without announcement, students should review lecture notes and assigned readings prior to attending class. It is the student's responsibility to ask questions for a better understanding of information covered.

Sketching is an essential part of architecture. Not only do we communicate ideas through sketching, we also remember, learn, and solve problems.

Schedule (tentative):

Week	Monday	Wednesday	Thursday
01_6.04	Introduction Precedents assigned Research groups assigned	Library Program given Program analysis, User needs	Work Day Desk Crits Site Visit
02_6.11	Precedent Presentations Work Day	Site design/DFW Kevin Sloan Studio Context Model Complete	Austin Library field trip
03_6.18	Conceptual Pin up 2pm parti sketches and models	Environmental Controls Program Organization Structures	Energy/Sustainability Desk Crits
04_6.25	Schematic Design pinup Site, Program, Structure Model #1 in Context	Exterior Skin/Technology Building materials Desk Crits	Life Safety + Code Lecture Desk Crits
05_7.02	Design Development Desk Crits	4th July Holiday	Pinup – Structures, ECS Jerry Kunkel, Mark Fratto Structural Model
06_7.09	Design Development Enclosure systems	Design Development Wall sections Begin Section study model	Pinup – Schematic set Building/Site Sections Section Study Model
07_7.16	Design Development	Design Development	Section Model Due Final drop date
08_7.23	Wall Section Drawings Detail study model	Design Development	Last Prelim review
09_7.30	Final production	Final Production	Final Models due: Final, section, + Detail
10_8.06	Final production- Drawings	Final Production – Drawings	Final Review

Attendance:

Attendance is mandatory. Two absences are allowed, after which you will be advised to withdraw from the class. For each additional absence students will receive a one letter grade reduction from his/her overall course grade. Students are expected to attend every studio session and all pin ups and reviews. Excuses are unacceptable for incomplete work and absences.

Students are expected to be in studio during the entire class session. Being tardy, leaving early, or disappearing for extended periods of time during class will amount to the equivalent of one absence per 3 occasions. Students will be considered late if they are not in class at the moment attendance is called. It is the student's responsibility to inform the instructor when he/she comes in late. If late, student should assume attendance was taken and he/she was marked 'Absent'.

The studio space is set up as a learning environment, working in studio is mandatory during class time and strongly encouraged outside of class time.

Other Requirements:

There will be field trips during the semester. Students are encouraged to attend all field trips as these form an important part of the design process. Carpool is recommended.

Coming to class without tools or things to work on/with will result in conference and student will be advised to go get his/her things to work on and will be counted absent. It is strongly encouraged that students print their work if working on the computer. Redlining drawings and sketching is still a primary vehicle for iterative design process.

Grading:

Projects will receive grades for: design, craftsmanship of drawings and models, and preliminary reviews and process.

Each assignment is equally important to further develop overall comprehension of course material and is considered mandatory.

Excellent craftsmanship is essential in architecture and will be a component of consideration for assignment evaluations. Craftsmanship helps develop architectural skills including attention to detail, articulation, and an understanding of jointure and connection. Craftsmanship is an important factor in model building, but also includes precision in drawing.

Work is due at the commencement of class on the assigned date. **Late work shall not be accepted.**

All evaluations of work shall be based on the students' design comprehension, mastery of course material, and the ability to communicate design thesis through dialogue, and visual presentation.

A – Exceptional

B – Above Average

C – Average

D – Poor

F – Failing

Letter grade definitions:

A – Exceptional:

Student has strongly exceeded all requirements as provided by instructor. Design solutions reflect genuine comprehensive understanding of concepts and design vocabulary. The design solution not only meets the requirements of the project but also exceeds the scope of work. An 'A' student challenges all reading material, lectures and assignments in a consistent process through an architectural dialogue with the instructor, critics and fellow students. The design process is clearly evident throughout the entire semester with the completion of all assignments, and demonstrates an evolution of the projects on a daily basis. Final drawings and models are of impeccable craft with a strong attention to detail that clearly explains the entire thought process and design thesis. Student presents project in a professional manner clearly enunciating concepts and design solution.

B – Above average:

Student has completed all requirements as provided by instructor. Design solutions reflect strong comprehension of design objectives, vocabulary and reading assignments. The design thought process steadily improves throughout the semester as the student is well prepared for every session with new work. Student participates in most class discussions, asks appropriate questions and shows genuine interest in developing design skills. Final drawing and models are well-crafted, with attention to detail. The student presents concepts thoroughly enough to engage in a discussion that helps to improve the project.

C – Average:

Student has completed all requirements as provided by instructor. Design solutions reflect basic comprehension of design objectives, vocabulary and reading assignments. The thought process of the design reflects some improvement throughout the semester. The student is prepared for most sessions with new work. Student participates in some class discussions, asks few questions and shows little interest in developing design skills. Final drawing and models are completed to meet requirements only.

D – Poor:

Student has not completed all requirements as provided by instructor. Design solutions fail to reflect basic design principles presented in studio, and demonstrate a lack of comprehension of course material. The design process does not evolve throughout the semester, as the student is ill prepared for sessions. Student rarely participates in class discussions and shows little initiative to advance design vocabulary. Assignments are rarely completed on time. Final drawings and models are poorly crafted with little attention to detail and minimal delineation of concepts.

F – Failing:

The following, in whole or in part, constitute a failing grade: student completes only a portion of the requirements as provided by instructor; design solutions fail to reflect any basic design principles presented in studio; the student demonstrates lack of comprehension of course material; the design process does not evolve throughout the semester; the student is ill prepared for sessions; the student does not participate in class discussions, and shows no initiative to advance design vocabulary; assignments are not completed on time; final drawings and models are crafted poorly without attention to detail and lack delineation of concepts.

Final evaluation will be broken down as follows:

Attendance and daily progress	10 %
Precedent Analysis Presentations	10 %
Fort Worth Central Library	80 %
Pinups x 5	10%
Final Review	20%
Final Dossier	10%

Grades are final and not negotiable.

Cell Phones and Computers:

Cell phones should not be a distraction during class time. Texting, talking, watching videos, and use of social media on your phone/computer is not permitted. Computers should only be used for completing assignments. Student will be asked to leave the studio and will be counted absent if he/she violates this policy.

Drop Policy:

Students may drop or swap (adding and dropping a class concurrently) classes through self-service in MyMav from the beginning of the registration period through the late registration period. After the late registration period, students must see their academic advisor to drop a class or withdraw. Undeclared students must see an advisor in the University Advising Center. Drops can continue through a point two-thirds of the way through the term or session. It is the student's responsibility to officially withdraw if they do not plan to attend after registering. **Students will not be automatically dropped for non-attendance.** Repayment of certain types of financial aid administered through the University may be required as the result of dropping classes or withdrawing. For more information, contact the Office of Financial Aid and Scholarships (<http://www.uta.edu/aao/fao/>).

Disability Accommodations:

UT Arlington is on record as being committed to both the spirit and letter of all federal equal opportunity legislation, including *The Americans with Disabilities Act (ADA)*, *The Americans with Disabilities Amendments Act (ADAAA)*, and *Section 504 of the Rehabilitation Act*. All instructors at UT Arlington are required by law to provide "reasonable accommodations" to students with disabilities, so as not to discriminate on the basis of disability. Students are responsible for providing the instructor with official notification in the form of a letter certified by the **Office for Students with Disabilities (OSD)**. Students experiencing a range of conditions (Physical, Learning, Chronic Health, Mental Health, and Sensory) that may cause diminished academic performance or other barriers to learning may seek services and/or accommodations by contacting:

The Office for Students with Disabilities, (OSD) www.uta.edu/disability or calling 817-272-3364.

Counseling and Psychological Services, (CAPS) www.uta.edu/caps/ or calling 817-272-3671.

Only those students who have officially documented a need for an accommodation will have their request honored. Information regarding diagnostic criteria and policies for obtaining disability-based academic accommodations can be found at www.uta.edu/disability or by calling the Office for Students with Disabilities at (817) 272-3364.

Title IX:

The University of Texas at Arlington does not discriminate on the basis of race, color, national origin, religion, age, gender, sexual orientation, disabilities, genetic information, and/or veteran status in its educational programs or activities it operates. For more information, visit uta.edu/eos. For information regarding Title IX, visit www.uta.edu/titleIX.

Academic Integrity:

Students enrolled in this course are expected to adhere to the UT Arlington Honor Code:

I pledge, on my honor, to uphold UT Arlington's tradition of academic integrity, a tradition that values hard work and honest effort in the pursuit of academic excellence.

I promise that I will submit only work that I personally create or contribute to group collaborations, and I will appropriately reference any work from other sources. I will follow the highest standards of integrity and uphold the spirit of the Honor Code.

UT Arlington faculty members may employ the Honor Code as they see fit in their courses, including (but not limited to) having students acknowledge the honor code as part of an examination or requiring students to incorporate the honor code into any work submitted. Per UT System *Regents' Rule* 50101, §2.2, suspected violations of university's standards for academic integrity (including the Honor Code) will be referred to the Office of Student Conduct. Violators will be disciplined in accordance with University policy, which may result in the student's suspension or expulsion from the University.

Student Support Services:

UT Arlington provides a variety of resources and programs designed to help students develop academic skills, deal with personal situations, and better understand concepts and information related to their courses. Resources include tutoring, major-based learning centers, developmental education, advising and mentoring, personal counseling, and federally funded programs. For individualized referrals, students may visit the reception desk at University College (Ransom Hall), call the Maverick Resource Hotline at 817-272-6107, send a message to resources@uta.edu, or view the information at www.uta.edu/resources.

Electronic Communication:

UT Arlington has adopted MavMail as its official means to communicate with students about important deadlines and events, as well as to transact university-related business regarding financial aid, tuition, grades, graduation, etc. All students are assigned a MavMail account and are responsible for checking the inbox regularly. There is no additional charge to students for using this account, which remains active even after graduation. Information about activating and using MavMail is available at <http://www.uta.edu/oit/cs/email/mavmail.php>.

Campus Carry: Effective August 1, 2016, the Campus Carry law (Senate Bill 11) allows those licensed individuals to carry a concealed handgun in buildings on public university campuses, except in locations the University establishes as prohibited. Under the new law, openly carrying handguns is not allowed on college campuses. For more information, visit <http://www.uta.edu/news/info/campus-carry/>

Student Feedback Survey:

At the end of each term, students enrolled in classes categorized as "lecture," "seminar," or "laboratory" shall be directed to complete an online Student Feedback Survey (SFS). Instructions on how to access the SFS for this course will be sent directly to each student through MavMail approximately 10 days before the end of the term. Each student's feedback enters the SFS database anonymously and is aggregated with that of other students enrolled in the course. UT Arlington's effort to solicit, gather, tabulate, and publish student feedback is required by state law; students are strongly urged to participate. For more information, visit <http://www.uta.edu/sfs>.

Final Review Week:

A period of five class days prior to the first day of final examinations in the long sessions shall be designated as Final Review Week. The purpose of this week is to allow students sufficient time to prepare for final examinations. During this week, there shall be no scheduled activities such as required field trips or performances; and no

instructor shall assign any themes, research problems or exercises of similar scope that have a completion date during or following this week *unless specified in the class syllabus*. During Final Review Week, an instructor shall not give any examinations constituting 10% or more of the final grade, except makeup tests and laboratory examinations. In addition, no instructor shall give any portion of the final examination during Final Review Week. During this week, classes are held as scheduled. In addition, instructors are not required to limit content to topics that have been previously covered; they may introduce new concepts as appropriate.

Emergency Exit Procedures:

Should we experience an emergency event that requires us to vacate the building, students should exit the room and move toward the nearest exit, which is located on the southwest corner of the building. When exiting the building during an emergency, one should never take an elevator but should use the stairwells. Faculty members and instructional staff will assist students in selecting the safest route for evacuation and will make arrangements to assist handicapped individuals.

Student Support Services:

UT Arlington provides a variety of resources and programs designed to help students develop academic skills, deal with personal situations, and better understand concepts and information related to their courses. Resources include tutoring, major-based learning centers, developmental education, advising and mentoring, personal counseling, and federally funded programs. For individualized referrals, students may visit the reception desk at University College (Ransom Hall), call the Maverick Resource Hotline at 817-272-6107, send a message to resources@uta.edu, or view the information at <http://www.uta.edu/universitycollege/resources/index.php>

Additional Information:

Faculty members should feel free to incorporate any of the following information into your course syllabus or other course materials.

Library Home Page	http://www.uta.edu/library
Subject Guides.....	http://libguides.uta.edu
Subject Librarians	http://www.uta.edu/library/help/subject-librarians.php
Course Reserves	http://pulse.uta.edu/vwebv/enterCourseReserve.do
Library Tutorials	http://www.uta.edu/library/help/tutorials.php
Connecting from Off- Campus.....	http://libguides.uta.edu/offcampus
Ask A Librarian.....	http://ask.uta.edu

Emergency Phone Number: 911 or 817.272.3003

Non-Emergency UTA PD:..... 817.272.3381

USE OF AEROSOL MATERIALS, PAINTS, AND OTHER HAZARDOUS CHEMICALS:

Due to health and safety regulations and University policy, no spray paints, adhesives and other hazardous aerosol products are allowed in the building. Furthermore, no painting or use of flammable or other hazardous chemicals is allowed anywhere in the building, including and especially the fire stairs. Use of such chemicals is a hazard to your health and safety and that of other building occupants. It is also against the law. Spray painting and similar activities are only permissible in the approved ventilated spray booths in the School Shop.

Violations of this policy will be subject to both academic and civil penalties.