



Arch 5501,5502, 5503 Architectural Design Studio Fall 2021 (old degree plan)

Arch 5501,5502, 5503 Architectural Design Studio & Arch 7000 Fall 2021 (new degree plan)

Texas Tech University 2021-2022 Undergraduate and Graduate Catalog Course Description

Arch 5501-5503 Topical studio that explores design, theoretical and/or technological issues that affect current architectural thought and practice.

Arch 7000 – Research 1 Semester Credit Hours

Research course in which students will learn and demonstrate the core skills necessary to draft a thesis, or generate an alternative research project.

Faculty Information:

- Mary K. Crites, AIA - Registered Architect: Texas, New Mexico
- Architecture Building Office: NA
- Office hours: By appointment
- Academic Office Phone: NA
 - Mobile: 806-790-7114, preferred
- Email: mary@mkcrites.com, I suspect my TTU address to be: mary.crites@ttu.edu.
- Wiki-link: I suspect it will be: http://arch.ttu.edu/wiki/Mary_K._Crites

The studio meets MWF 1:00-4:50 p.m. in Architecture Building Room 611.

Fall 2021 Calendar

First Class Day:	23 August
Holidays:	6 September- Labor Day 24-28 November - Thanksgiving
Last Class Day:	1 December
Semester Ends	8 December
Final Grades	13 December

Student Performance Criteria

The 2020 NAAB Student Criteria encourages/requires for this class to integrate the following into the course study:

SC.1 Health, Safety, and Welfare in the Built Environment

SC.2 Professional Practice
SC.3 Regulatory Context
SC.4 Technical Knowledge
SC.5 Design Synthesis
SC.6 Building Integration

This studio is designed to integrate all of these criteria and will explore and integrate the elements necessary for an integrated design including the *Ability* to produce a comprehensive architectural project that demonstrates each student's capacity to make design decisions across scales while integrating the following:

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

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.

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.

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

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

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.

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.

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

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.

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

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

Environmental Systems: *Understanding* the principles of environmental systems' design such as embodied energy, active and passive heating and cooling, indoor air quality, solar orientation, daylighting and artificial illumination, and acoustics; including the use of appropriate performance assessment tools.

Structural Systems: *Understanding* of the basic principles of structural behavior in withstanding gravity and lateral forces and the evolution, range, and appropriate application of contemporary structural systems.

Student Learning Outcomes: Upon completion of this course students will be able to:

Construct, present, and defend advanced comprehensive architectural design solutions that integrate the following criteria:

- **Form and Space:** Defined by systems of structure, enclosure, and circulation, organized by hierarchical patterns, articulated by the qualities of shape, color and texture, and determined by the principles of scale, and theories of proportion, aesthetics and compositional arrangement.
- **Technology:** Methods of construction, properties of materials, building systems, sustainable design, and mechanical systems including plumbing, electrical, lighting, and HVAC.
- **Program:** The accommodation of human physical and psychological needs, planning for specific activities particular to building typology, identifying spatial relationships, allocation of spatial sizes and requirements, and providing for life safety and accessibility.
- **Context:** Sensitivity to social precedents both physical and psychological. Consideration of economic factors, urban patterns, regional issues, community needs and aspirations, and culturally diverse attitudes.
- **Site and Environment:** Design for ecological preservation considering natural environment, climate, solar exposure, wind temperature, and precipitation. Minimize negative environmental impact through sustainable design strategies.
- **Design Process:** The intellectual activity of conceptualizing, analyzing, and demonstrating architectural form and space using creative, critical, and logical thinking skills, hand drawing, three-dimensional hand-built models, and electronic media.
- **Precedent and Evidence Based Design (EBD):** Design solutions are to be informed by established principles and noteworthy examples found in professional and academic works. EBD emphasizes the importance of using credible data in order to influence the design process.

Assessment of Learning Outcomes

1. Research assignments: Written reports and oral presentations including but not limited to:
 - code reviews; building, accessibility, energy
 - zoning, including parking requirements

- precedent study
 - Site and climate analysis
 - Classroom design standards
 - building materials/products
 - Building budgets and project firm fees
2. Architectural design project assignments.
- Schematics – site and floor plan, mechanical/structural systems identified, code plan/calculations, one exterior image
 - Design Development- refinement/corrections of above plus roof plan, building sections, mechanical and structural diagrammatic plans,
 - Limited Construction Documents – refinement/corrections of above plus wall section, roof detail and building envelope waterproofing details.

The grading during the semester will be weighted as follows:

- Schematic Design 25%
- Design Development-Midterm.....20%
- Final Construction Docs Design 25%
- Research/Analysis Assignments.....20%
- Input during class discussions.....10%

A Class Calendar will be provided as a separate document

CLASS POLICIES

Grading

The instructor determines all grades for a course. The method of determining a grade will be presented to students at the beginning of the semester. The grades used, including plus and minus, with their interpretations, are: A, excellent; B, good; C, average; D, inferior (passing, but not necessarily satisfying degree requirements); F, failure; P, passing; PR, in progress; I, incomplete; and W, withdrawal (not to be confused with a drop). The letter R designates a course repeated to remove an I. The grade of PR is given only when the work in a course extends beyond the semester or term; it implies satisfactory performance and is used primarily in individual study courses. The grades of CR (credit) and NC (no credit) are given in certain instances. The grade of I is given only when a student's work is satisfactory in quality but, due to reasons beyond his or her control, has not been completed. It is not given instead of an F. Prior to assigning the I, the instructor must fill out a form available online with OP 34.12 stating the reasons beyond the student's control for granting the I and the conditions to be met to remove

the I. All signatures are required on the form. The I may be replaced by an R if the course is repeated, and the appropriate grade will be given for the second registration. The grade of I will revert to an F after one calendar year if the conditions for completing the I as stated on the form have not been met. Please refer to the Class attendance section of this Syllabus as attendance does impact your grade.

Studio Participation and Conduct

This studio will be run like an office. As such, each student is expected to work on the assigned project during each studio session. For study and critique, the student must have at his/her desk at all times:

- role of tracing paper, several felt tipped pens and soft sketching pencils
- architect and engineering scale
- personal computer with current assignment available
- hard copy or electronic access to current and past design ideas

Prohibitions

Like all offices, there are constraints. If your actions would be disruptive to others, please ask the Instructor or refrain from the activity during studio sessions. The following list a few:

- smoking or other uses of tobacco
- headphone, ear buds
- outside distractions; music, videos, etc.
- use of spray paint or aerosol products of any kind

Student Responsibilities

- students will keep the design studio clean and neat
- at conclusion of the semester, students must remove all projects, supplies and personal equipment
- be proficient in digital media/software
- students are required to be on the college network system

Class Attendance Policy

The College of Architecture at Texas Tech University takes the professional preparation of its students as future architects seriously. Architectural professionals understand the importance of being present, on time, with work completed. Adherence to these professional attributes begins in architectural education. To that end, excessive absences will, at the discretion of the instructor, cause the deduction of points from a student's grade, or may be cause for repeating the course. Responsibility for class attendance rests with the student. Instructors set an attendance policy for each course they teach. The university expects regular and punctual attendance at all scheduled classes, and the university reserves the right to deal at any time with individual cases of

nonattendance. Instructors should state clearly in their syllabi their policy regarding student absences and how absences affect grades.

Like an office, attendance is mandatory. This includes attending all reviews, discussions and field trips. It is requested that the Instructor be notified when you will be late arriving, leaving early or missing a class is required. Arriving late to class, working on anything other than studio work and departing early will be considered as an absence. Working from home or in the computer lab during class times without the permission of the instructor is not allowed. This Instructor will allow each student to have **THREE absences** during the semester. **The Instructor is not going to distinguish between excused and unexcused, an absence is an absence. TWO points will be deducted from the final grade for each additional absence.**

Absence due to religious observance: The Texas Tech University Catalog states that a student who is absent from classes for the observance of a religious holy day will be allowed to take an examination or complete an assignment scheduled for that day within a reasonable time after the absence. **Notification must be made in writing and delivered in person no later than the 15th class day of the semester.** Absence due to officially approved trips – The Texas Tech University Catalog states that the person responsible for a student missing class due to a trip should notify the instructor of the departure and return schedule in advance of the trip. The student may not be penalized and is responsible for the material missed. Whether an absence is excused or unexcused is determined solely by the instructor with the exception of absences due to religious observance and officially approved trips described above. The Center for Campus Life will notify faculty, at the student's request, when a student is absent for four consecutive days with appropriate verification of a health related emergency. This notification does not excuse the student from class, it is provided as a courtesy. The service is explained as follows and can be found on the Center for Campus Life web site at: <http://www.campuslife.ttu.edu/crisis/>

Reporting Illness

In case of an illness that will require absence from class for more than one week, the student should notify his or her academic dean. The dean's office will inform the student's instructors through the departmental office. In case of class absences because of a brief illness, the student should inform the instructor directly. Other information related to illness can be found in the Student Handbook. The Center for Campus Life is responsible for notifying the campus community of student illnesses, immediate family deaths and/or student death. Generally, in cases of student illness or immediate family deaths, the notification to the appropriate campus community members occur when a student is absent from class for four (4) consecutive days with appropriate verification. It

is always the student's responsibility for missed class assignments and/or course work during their absence. The student is encouraged to contact the faculty member immediately regarding the absences and to provide verification afterwards. The notification from the Center for Campus Life does not excuse a student from class, assignments, and/or any other course requirements. The notification is provided as a courtesy.

The Architectural Design Studio

The studio provides a unique and beneficial opportunity for students to learn about respect, the design process, communication, collaboration, presentation, criticism, and innovation. Few other teaching methods make it possible for students to share ideas and concepts and learn by doing, in a problem-based, flexible environment. As such, the College of Architecture (COA) at Texas Tech University takes their responsibility to ensure the ongoing success of the studio environment seriously. While our primary goal is to educate future architects, it is equally important that we also enhance interpersonal, ethical, and critical thinking skills so that each student may become a competent professional, leader, and team collaborator.

Academic Integrity and Civility in the Classroom

"It is the aim of the faculty of Texas Tech University to foster a spirit of complete honesty and a high standard of integrity. The attempt of students to present as their own any work that they have not honestly performed is regarded by the faculty and administration as a serious offense and renders the offenders liable to serious consequences, possibly suspension."

Students are expected to assist in maintaining a classroom environment that is clean, courteous, and conducive to learning. In order to assure that all students have the opportunity to gain from time spent in class, unless otherwise approved by the instructor; students are prohibited from engaging in any other form of activity that is a distraction to others. Inappropriate behavior in the classroom shall result, minimally, in a request to leave class. Students are required to respect the rights of fellow students.

<http://www.depts.ttu.edu/officialpublications/catalog/AcademicsRegulations>.

Submission Policy

The studio professor reserves the right to refuse to grade a project if it is notably incomplete, extremely late, does not meet requirements, is substantially inferior in quality, or is poorly displayed. All design presentations must be submitted at or before the assigned time. Any project submitted after the time and date scheduled will receive a one letter (10 points) reduction in grade, unless the circumstances-documented illness or death, unusual acts of nature, family crisis-warrant consideration by the faculty and constitute a valid justification. Deadlines for each project are set by the studio professor. Students are responsible for displaying their projects securely on the assigned display

surfaces. Pins, tacks, staple guns, etc. will not be provided by the College. Projects may not be removed until the instructor has given express permission. Once a student has turned in a project and it has been placed on the wall for display, it may not be altered or added to in any way. As University policy, all work submitted to the studio professor and/or College becomes the property of the University.

ADA Statement

Any student who, because of a disability, may require special arrangements in order to meet the course requirements should contact the instructor as soon as possible to make any necessary arrangements. **Students shall present appropriate verification from Student Disability Services during the instructor's office hours as soon as possible.** Please note instructors are not allowed to provide classroom accommodations to a student until appropriate verification from Student Disability Services has been provided. For additional information, you may contact the Student Disability Services office at 335 West Hall or 806-742-2405.

TTU Statement of Ethical Principles

Texas Tech University is committed to the values of mutual respect; cooperation and communication; creativity and innovation; community service and leadership; pursuit of excellence; public accountability; and diversity.

<http://www.depts.ttu.edu/officialpublications/catalog/EthicalPrinciples.php>

END