

ARCH 7000: Research

College of Architecture, Texas Tech University
Fall, 2020

Instructors:

Coordinator, Associate Professor Peter Raab, peter.raab@ttu.edu [Office Hours: by appointment only]

Assistant Professor Dr. Peng Du, peng.du@ttu.edu [Office Hours: by appointment only]

Meeting Times:

Wednesday, 12:00-1:00p [Section 312 (online instruction only, virtual meetings via Zoom + Miro)]

Wednesday, 12:00-1:00p [Section 305 (hybrid instruction, Room ARCH 702, and online via Zoom + Miro)]

Course Description

Research is vital to architecture – the ability to delve into a subject, extract information on that subject, interpret the information and use it. As a research component to the research-based studio (ARCH 5501: Architectural Design Studio) themed “Densifying Downtown Lubbock: Designing for Energy, Ecology, and People”, this course aims to develop specific research agenda that is linked to students’ projects in the studio. The studio project seeks to explore alternative design approaches for tall buildings; to create high-rise buildings that are inspired by the cultural, physical and environmental aspects of place. Therefore, students will work with instructors to develop their individual studies on tall building design, technology and sustainability using their design projects in the studio as the main case studies.

Student Learning Objectives

Disciplinary knowledge objectives to be achieved by the successful completion of this course:

- Develop a critical attitude and viewpoint, and the ability to debate, with regard to a particular research topic.
- Understand and collect available knowledge, and conduct literature review.
- Develop clear research methodology.
- Improve critical reading and writing skills.

Student Performance Objectives

Professional knowledge objectives to be achieved by the successful completion of this course:

- Discuss and determine a particular research topic in sustainable buildings and cities.
- Conduct literature review and review case studies to define the research questions.
- Develop specific research methods to explore architecture, urbanism and/or sustainability.
- Improve writing and illustration skills for architectural and urban research.

Means of Evaluation:

Methods of Assessment. The assessment for this course is based on a personal research topic directly associated with the student’s project in the design studio, to be agreed between the student and professors. This could be an aspect of design strategies or a particular technology applied to the student’ studio project. A minimum 1500-word illustrated paper is required to be submitted as part of the studio final submissions. It is essential that all illustrations (and quotations from sources) are properly referenced.

The paper needs to be developed based on a clearly defined research topic, and cannot be a comprehensive description of the design projects in the studio. Also, each student is required to complete and submit her / his paper individually, even though students will work in pairs in the studio.

Deliverables. Course deliverables include three “in-progress” writing assignments and a final research paper. Extensions to due dates will not be granted unless there are approved extenuating circumstances. Substantial grade reduction will occur if work is received late or incomplete.

- Assignment 1 (Deadline: 9am, Friday, October 9th): research topic and abstract, minimum 300 words
- Assignment 2 (Deadline: 9am, Friday, October 30th): research paper draft 1, minimum 600 words
- Assignment 3 (Deadline: 9am, Friday, November 20th): research paper draft 2, minimum 1,000 words
- Final submission (Deadline: 9am, Monday, December 7th): final research paper, minimum 1,500 words

Note: As a research component to the research-based studio (ARCH 5501: Architectural Design Studio), please refer to the studio syllabus for all other information.