Instructor Information

Instructor:
Narjes Abbasabadi, Ph.D.

Office Telephone Number:
(817) 272-2801

Email Address:
narjes.abbasabadi@uta.edu

Office Hours:
M/W/F with appointment.

Course Information

Section Information:
ARCH 3323/5323: Building Construction: Materials and Methods

Time and Place of Class Meetings:
M, T, W, Th (10:30 AM -12:30 PM)
June 8th - July 9th
Canvas is the main communications platform for this course.

Description of Course Content:
This course is a study of construction methods and materials. The performance and behavior of major materials and construction systems are explored from different aspects, including sustainability and environmental impact. Prerequisite: ARCH 2552.

Student Learning Outcomes:
Upon completion of this course, student will:

1. Understand the fundamentals of project development process and design and construction delivery systems.
2. Understand building standards, codes, and regulations
3. Develop an understanding of the major material and construction systems, including masonry, mass timber, light wood frame, steel frame, light gauge steel, and concrete construction.
4. Develop an understanding of the material properties (physical, structural, thermal etc.).
5. Develop an understanding of building enclosure and different cladding systems.
6. Understand sustainability in construction, focusing on the environmental impacts associated with materials and buildings.
7. Research alternative materials and methods that are safe, economical and environmentally responsible and resource-efficient.
Required Textbooks and Other Course Materials:

Other Recommended Materials:

Descriptions of major assignments and examinations:
Tests (3 x 20) 60
Homework Assignments (undergrad) (4 x 10) & Research/Presentation (graduate students) 40
Sketch/drawing Assignments (4 x 10) 40
Attendance 20
Final Exam 40
Maximum points 200

Grading Information

Grading:
Letter grade A will be given to a student with a score of 90% or higher; Letter grade B to a student with a score of 80% to 89.5%; Letter grade C to a student with a score of 70% to 79.5%; Letter grade D to a student with a score of 60% to 69.5%; Letter grade F to a student with a score of less than 60%.

Course Schedule

<table>
<thead>
<tr>
<th>Topic</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Principals of Construction</strong></td>
<td></td>
</tr>
<tr>
<td>Introduction</td>
<td></td>
</tr>
<tr>
<td>Building Delivery Process; Building Standards and Codes</td>
<td>June 8 - June 11</td>
</tr>
<tr>
<td>Sustainability in Construction</td>
<td></td>
</tr>
<tr>
<td>Foundations and Sitework</td>
<td>June 15</td>
</tr>
<tr>
<td>Wood and Wood Products</td>
<td></td>
</tr>
<tr>
<td>Heavy Timber and Mass Timber Construction</td>
<td></td>
</tr>
<tr>
<td>Wood Light Frame Construction</td>
<td>June 16 - June 23</td>
</tr>
<tr>
<td><strong>Materials and Properties of Materials</strong></td>
<td></td>
</tr>
<tr>
<td>(Structural, Thermal, Acoustical, and Fire-Related Properties; Air Leakage and Water Vapor Control)</td>
<td></td>
</tr>
<tr>
<td>Brick, Stone and Concrete Masonry</td>
<td>June 24</td>
</tr>
<tr>
<td>Concrete and Concrete Construction</td>
<td>June 25</td>
</tr>
<tr>
<td><strong>Construction Systems</strong></td>
<td></td>
</tr>
<tr>
<td>Steel Frame Construction</td>
<td></td>
</tr>
<tr>
<td>Light Gauge Steel Frame Construction</td>
<td>June 29 - June 30</td>
</tr>
<tr>
<td>Designing the Building Enclosure</td>
<td></td>
</tr>
<tr>
<td>Envelop Properties</td>
<td></td>
</tr>
<tr>
<td>Roofing, Glass, Windows and Doors</td>
<td>July 1 - July 9</td>
</tr>
<tr>
<td>Cladding with Masonry, Concrete, Metal and Glass</td>
<td></td>
</tr>
<tr>
<td>Reference Projects: Environmentally Friendly, Safe and Economical Alternatives to current materials and methods</td>
<td></td>
</tr>
</tbody>
</table>
**Institution Information**

UTA students are encouraged to review the below institutional policies and informational sections and reach out to the specific office with any questions. To view this institutional information, please visit the [Institutional Information page](http://www.uta.edu/provost/administrative-forms/course-syllabus/index.php) which includes the following policies among others:

- Drop Policy
- Disability Accommodations
- Title IX Policy
- Academic Integrity
- Student Feedback Survey
- Final Exam Schedule

**Additional Information**

**Attendance:**

At The University of Texas at Arlington, taking attendance is not required but attendance is a critical indicator of student success. Each faculty member is free to develop his or her own methods of evaluating students' academic performance, which includes establishing course-specific policies on attendance.

As the instructor of this section, I have established the following attendance policy: students are required to attend every class session and participate in class discussions and activities. More than 2 unexcused/unapproved absences will affect the final grade. The third absences will result as a one full grade reduction. Students are expected to be on time and to remain in class for the duration of the course period (M/T/W/TH 10:30 AM – 12:30 PM). Missing more than 30 minutes of class time will be considered as an absent.

However, while UT Arlington does not require instructors to take attendance in their courses, the U.S. Department of Education requires that the University have a mechanism in place to mark when Federal Student Aid recipients “begin attendance in a course.” UT Arlington instructors will report when students begin attendance in a course as part of the final grading process. Specifically, when assigning a student a grade of F, faculty report must the last date a student attended their class based on evidence such as a test, participation in a class project or presentation, or an engagement online via Canvas. This date is reported to the Department of Education for federal financial aid recipients.

**Observance of Religious Holy Days**

[https://www.uta.edu/catalog/2001/general/academicreg.html](https://www.uta.edu/catalog/2001/general/academicreg.html)

A student who misses an examination, work assignment or other project because of an observance of a religious holy day will be given the opportunity to complete the work missed within a reasonable time after the absence provided the student has properly notified each instructor. To meet the proper notification requirements, students must notify each instructor in writing of classes scheduled on the dates they will be absent in observance of a religious holy day.

Notification must be made within the first 15 class days and either personally delivered, acknowledged and dated by the instructor, or sent certified mail, return receipt requested. The student may not be penalized for these excused absences, but the instructor may appropriately respond if the student fails to complete satisfactorily the missed assignment or examination within a reasonable amount of time after the excused absence.

A “religious holy day” means a holy day observed by a religion whose places of worship are exempt from property taxation under Section 11.20 of the Tax Code.
Emergency Exit Procedures:
Should we experience an emergency event that requires evacuation of the building, students should exit the room and move toward the nearest exit. When exiting the building during an emergency, do not take an elevator but use the stairwells instead. Faculty members and instructional staff will assist students in selecting the safest route for evacuation and will make arrangements to assist individuals with disabilities.

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 by appointment, drop-in tutoring, mentoring (time management, study skills, etc.), major-based learning centers, counseling, and federally funded programs. For individualized referrals, students may call the Maverick Resource Hotline at 817-272-6107, send a message to resources@uta.edu, or view the information at Resource Hotline (http://www.uta.edu/studentsuccess/success-programs/programs/resource-hotline.php).

IDEAS Center:
The IDEAS Center (https://www.uta.edu/ideas/) (2nd Floor of Central Library) offers FREE tutoring and mentoring to all students with a focus on transfer students, sophomores, veterans and others undergoing a transition to UT Arlington. Students can drop in or check the schedule of available peer tutors at www.uta.edu/IDEAS, or call (817) 272-6593.

The English Writing Center (411LIBR):
The Writing Center offers FREE tutoring in 15-, 30-, 45-, and 60-minute face-to-face and online sessions to all UTA students on any phase of their UTA coursework. Register and make appointments online at the Writing Center (https://uta.mywconline.com). Classroom visits, workshops, and specialized services for graduate students and faculty are also available. Please see Writing Center: OWL for detailed information on all our programs and services.

The Library’s 2nd floor Academic Plaza (http://library.uta.edu/academic-plaza) offers students a central hub of support services, including IDEAS Center, University Advising Services, Transfer UTA and various college/school advising hours. Services are available during the library’s hours of operation.

Librarian to Contact:
Each academic unit has access to Librarians by Academic Subject that can assist students with research projects, tutorials on plagiarism and citation references as well as support with databases and course reserves.

Emergency Phone Numbers

In case of an on-campus emergency, call the UT Arlington Police Department at 817-272-3003 (non-campus phone), 2-3003 (campus phone). You may also dial 911. Non-emergency number 817-272-3381

Library Information

Research or General Library Help
Ask for Help
• Academic Plaza Consultation Services (library.uta.edu/academic-plaza)
• Ask Us (ask.uta.edu/)
• Research Coaches (http://libguides.uta.edu/researchcoach)
Resources
• Library Tutorials (library.uta.edu/how-to)
• Subject and Course Research Guides (libguides.uta.edu)
• Librarians by Subject (library.uta.edu/subject-librarians)
• A to Z List of Library Databases (libguides.uta.edu/az.php)
• Course Reserves (https://uta.summon.serialssolutions.com/#/course_reserves)
• Study Room Reservations (openroom.uta.edu/)