Instructor: Charlton N. Lewis
Office Hours: (confirm by appointment) TH 1:00 PM - 2:30 PM
Office: SUT. 4.116
email: charltonlewis@austin.utexas.edu

LECTURE SECTION: TTH 8:00 – 9:30 AM, Location: Gol 3.120

LAB SECTIONS; T 6:00PM- 9:00PM:
(Note: Verify with the unique number you are registered for..)
ARC 415K (00710): SUT 2.112, Andrea Mellard, Teaching Assistant
ARC 415K (00715): SUT 2.114, Fatima Betts, Teaching Assistant
ARC 415K (00720): SUT 4.118 Robbie Anderson, Teaching Assistant

Design is not making beauty, beauty emerges from selection, affinities, integration, love.”
- Louis Kahn
COURSE DESCRIPTION:

Construction 1, as the first of a series of four interrelated construction courses, serves as an introduction to four topics engaged consistently throughout the subsequent sequence. Specifically those topics being that of Materials, Comfort+Energy, Structure+Statics, and Assembly.

The learning objective of this course is to provide and foster a tacit understanding of these four topics and for the course engagement as a whole to provide the basis for a comprehensive understanding of the built environment.

The course is presented as two lectures per week and one lab session per week. The lab that you are registered for is your lab assignment for the duration of the semester and that lab unique number should be noted on every assignment submitted.

METHODOLOGY:

The primary methodology of this course will be by means of a reiterative learning process with the lecture portion of the course presenting and framing relevant topics of discussion, which will then be further investigated and discussed at the lab level. The expectations for this course is that each student will apply significant effort in areas of research, application, and in discussion of the topics presented. In the lab sections in particular, the active engagement of your curiosity and the desire for a greater comprehension of the built environment is a fundamental requirement and expectation.

The lecture presentations will also present pertinent case studies to reinforce your comprehension of the subject matter. Additionally, we will leverage opportunities to invite significant practitioners in the fields of architecture, engineering, and construction to share relevant projects and experiences with the course participants.

Field trips to visit construction sites will occur potentially during both lecture and lab sessions. For these field trips, you must wear long pants, closed toe shoes, and bring hard hats and safety glasses (which will be provided by the school). Promptness and professional on-site conduct is essential to the continued success of the visits.
COURSE SCHEDULE*:
wk 1 introduction [course overview & methodologies]
wk 2-4 design integration; site & environmental response; thermal comfort & energy
wk 5-7 building assemblies & systems; building envelope

wk 8 10/17/17 Exam 1, Gol 3.120
wk 8-10 materials & material properties/behaviors
wk 11 loads & loading intro; statics
wk 12-13 statics; structure + elements of structure

wk 13 Thanksgiving Holidays 11/22/16 - 11/25/16
wk 14-15 statics; structure + elements of structure
wk 15 last Con1 class day Th. 12/07/16

wk 17 12/19/15, Tuesday, Final Exam (Exam 2) 2:00-5:00, Gol 3.120

*note: this schedule is subject to revision

READINGS & REFERENCES:
Required Text: Required readings will be uploaded to Canvas or BOX as needed during the course of the semester.

Recommended Reference Text:
Building Construction Illustrated, 5th edition. Ching, Francis D. 2014 (Available at a number of outlets including amazon.com)

RESEARCH AND RESOURCES:
Digital resources, as prescribed by the instructor including Evernote (for research archiving), DETAIL Inspiration, THE PLAN, and ArchDaily.

Additional course materials will be made available on Canvas including this syllabus, pdfs of the lectures, and other class materials.

Additionally we will look to engage the abundant resources of UTSOA in our research and analytical efforts including the architecture library, Alexander archives, and the Materials Library http://soa.utexas.edu/resources/matlab
DELIVERABLES & ASSIGNMENTS OVERVIEW:
Coursework over the semester will have the following breakdown for grading;
Note: ALL GRADERS ARE SUBJECT TO DEDUCTIONS FOR ABSENCES, LATE WORK, AND LATE ARRIVALS.

- **Lecture Quizzes/Attendance:** 10%; cumulatively of lecture meeting; final quantity tbd.
  A brief “interrogation” or similar mechanism will be presented at the beginning of each lecture and attendance will be recorded accordingly by these means.

- **Lab Exercises/Assignments:** 20%; cumulatively of assigned lab meetings;
  Typically lab assignments will be assigned during lab on Tuesdays, discussed, and completed in lab, and submitted at its conclusion. In some cases collaboration will be expected and clearly indicated at the point of assignment. Field notes are expected at all project/site visits. And food is prohibited during lab sessions.

- **Research Assignments:** 30%; cumulatively of assigned ab meetings;
  In the form of research/case study assignments, these assignments will typically be longer in duration and due at the beginning of the following week’s lab. These assignments will be constructed with a specific research, analytical or learning objective in mind. To reiterate, late work is subject to penalty and a subsequent reduction in grade.

- **Exam 1** 20%; covering first half of the semester’s material
  Tuesday, October 17th, 8:00-9:15 AM

- **Exam 2 (Final Exam)** 20%; covering second half of the semester’s material
  Tuesday, December 19th, 2:00-5:00 PM

GRADING:
The grading for this course is based upon the consistency of effort given and the quality, timeliness, and consistency of the work submitted. Your synthesis of these objectives will subsequently be reflected in your grasp of the course material, as demonstrated by your examination responses. Much effort will be put forth by both the instructor and the teaching assistants in order to provide you with the knowledge base and opportunity to succeed in this course. But the effort must be a mutual one.

Grades. The assignment of letter grades follows a straight scale with minimum points percentages accumulated (of the maximum attainable total) as follows:

- **A** 93.33% or higher
- **A-** 90.00% or higher
- **B+** 86.67% or higher
- **B** 83.33% or higher
- **B-** 80.00% or higher
- **C+** 76.67% or higher
- **C** 73.33% or higher
- **C-** 70.00% or higher
- **D+** 66.67% or higher
- **D** 63.33% or higher
- **D-** 60.00% or higher
- **F** 0.00%
“A/A-” an exceptional understanding of the course materials and work consistently meeting the course objectives and beyond over the course of the semester

“B+/B” a fundamental understanding of the course materials and work meeting the course objectives, but with some inconsistencies over the course of the semester

“B-/C+” a general understanding of the course materials and work meeting the course objectives over the course of the semester, but with moderate inconsistencies over the course of the semester

“C/C-” a general understanding of the course materials and work meeting the course objectives, but with serious inconsistencies over the course of the semester

“D+/D/D-/F” a fundamental lack of an understanding of the course materials and work not demonstrating sufficient or appropriate effort over the course of the semester

All assignments and examinations must be submitted on the due dates. Late papers and assignments will be reviewed but not counted towards the cumulative grading. An incomplete (X grade) will be awarded only in instances of medical or severe family emergencies. Documentation of your specific circumstance is required.

ATTENDANCE:
Attendance is expected at all lectures and will be demonstrated by quiz submissions during the lecture period and/or as noted by your teaching assistants. Attendance will also be recorded during lab sessions as well.

Active participation during the labs is particularly critical as these sessions afford an opportunity for a greater level of interaction and learning. In both lecture and lab sections digital media and cellphone usage is strictly prohibited and subject to grading ramifications if observed.

Students with two (2) unexcused/undocumented absences may be dropped from the course without further notice or dropped a full letter drop in your final grade for the course. Please contact the instructor or your teaching assistant prior to class if you expect to be late or to miss class and to ascertain if the absence will be viewed as unexcused. A student who misses classes or other required activities for the observance of a religious holy day should inform the instructor as far in advance of the absence as possible, so that arrangements can be made to complete an assignment within a reasonable time after the absence. A student who fails to complete missed work within the time allowed will be subject to the normal academic penalties.

Accommodation for Religious Holidays
By UT Austin policy, you must notify your teaching assistant or me of your pending absence at least fourteen days prior to the date of observance of a religious holy day. If you must miss a class, an examination, a work assignment, or a project in order to observe a religious holy day, you will be given the opportunity to complete the missed work within a reasonable time after the absence.
Academic Dishonesty:
The core values of The University of Texas at Austin are learning, discovery, freedom, leadership, individual opportunity and responsibility. Each member of the University is expected to uphold these values through integrity, honesty, trust, fairness, and respect toward peers and community. Academic dishonesty will not be tolerated in this class and will be subject to University disciplinary policy as appropriate to the cause.

STUDENTS SERVICES:
Please notify your instructor at the beginning of the semester of any adaptation you may require to accommodate a specific physical or cognitive need. You will be requested to provide documentation to the Dean of Students' Office, in order that the most appropriate accommodations can be determined. Specialized services are available on campus through the Services for Students with Disabilities, also found via the web at http://deanofstudents.utexas.edu/ssp/.

The Counseling & Mental Health Center (CMHC) offers resources for general health and well being, time management, stress management, test anxiety and other personal concerns. The Center is located on the 5th floor of the Student Services Building. The telephone number is (512) 471-3515. http://cmhc.utexas.edu

If you have concerns about the behavior of someone, the Behavior Concerns Advice Line is available 24/7 to offer assistance: (512) 232-5050 and the website is: https://besafe.utexas.edu/behavior-concerns-advice-line