ARCH 5336 Pro Practice II: Programming and Site Planning, Spring 2017 Course Syllabus

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Office Hours: Before or after scheduled class meetings.

Section Information: ARCH 5336-001 - Professional Practice: Programming

and Technical Site Planning

Time and Place of Class Meetings: Monday & Wednesday

7:30PM - 8:50PM, Room 401

Description of Course Content: (3-0) Course covers the programming phase of a project, discussing how to document a client's needs and interpret those needs into a code complying, tangible building. The course closes with on overview of the technical aspects of site planning, including grading, utilities, zoning and accessibility requirements.

Student Learning Outcomes: Develop an understanding of how to listen to your client and assimilate their needs into a programming document. Develop personal work habits that focus on client needs, by seeing project from client's perspective. Develop understanding project costs, how they are financed and the impacts these factors have on design. Develop a skill level to accurately understand the physical impact of existing site conditions and develop the ability to design a site in an efficient, environmentally sensitive and technically competent manner.

Required Textbooks and Other Course Materials: Reading materials will be provided by instructor.

Descriptions of major assignments and examinations with due dates: Refer to attached course outline.

Grading Policy: Individual grades for 5 assignments will be equally averaged for final grade. Projects turned in late shall have 10 points automatically deducted from assignment grade. Attendance and in-class participation are also used to modify final grade at instructor's discretion.

Expectations for Out-of-Class Study: Beyond the time required to attend each class meeting, students enrolled in this course should expect to spend at least an additional 9 hours per week of their own time in course-related activities, including reading required materials and completing assignments.

Make-up Exams: To be able to take a missed exam a letter from the doctor or county coroner is required. A missed exam grade is 0. Please note the make-up exam is not the same exam as that issued on the scheduled exam date.

Grade Grievances: Any appeal of a grade in this course must follow the procedures and deadlines for grade-related grievances as published in the current undergraduate / graduate catalog.

Attendance Policy: At The University of Texas at Arlington, taking attendance is not required. Rather, 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 will require regular attendance. For each 3 absences deduct one letter grade from final grade to be recorded for the course. A laptop is required for use in each class meeting, not having a laptop in class will count as an absence.

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://wweb.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). Only those students who have officially documented a need for an accommodation will have their request honored. 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. Information regarding diagnostic criteria and policies for obtaining disability-based academic accommodations can be found at www.uta.edu/disability.

<u>Counseling and Psychological Services, (CAPS)</u> <u>www.uta.edu/caps/</u> or calling 817-272-3671 is also available to all students to help increase their understanding of personal issues, address mental and behavioral health problems and make positive changes in their lives.

Non-Discrimination Policy: 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.

Title IX Policy: The University of Texas at Arlington ("University") is committed to maintaining a learning and working environment that is free from discrimination based on sex in accordance with Title IX of the Higher Education Amendments of 1972 (Title IX), which prohibits discrimination on the basis of sex in educational programs or activities; Title VII of the Civil Rights Act of 1964 (Title VII), which prohibits sex discrimination in employment; and the Campus Sexual Violence Elimination Act (SaVE Act). Sexual misconduct is a form of sex discrimination and will not be tolerated. For information regarding Title IX, visit www.uta.edu/titleIX or contact Ms. Jean Hood, Vice President and Title IX Coordinator at (817) 272-7091 or imhood@uta.edu.

Academic Integrity: Students enrolled all UT Arlington courses 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 in their courses by 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. Additional information is available at https://www.uta.edu/conduct/.

Title IX: The University of Texas at Arlington is committed to upholding U.S. Federal Law "Title IX" such that no member of the UT Arlington community shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity. For more information, visit www.uta.edu/titleIX.

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Instructors 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 Policy: 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

Student Feedback Survey: At the end of each term, students enrolled in classes categorized as lecture, seminar, or laboratory shall be directed to complete a 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 at the north end of the architecture building, (exit stair). 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.

ARCH 5336 Programming and Site Planning, Spring 2015

WEEK 1 Wednesday January 18

- Review syllabus and course schedule.
- Attendance policy.
- Lap tops every day, come prepared to work and discuss material in class each assigned class day.
- Start at 7:00PM end at 8:15PM
- Introduction to course and review of learning objectives
- Pre-Design-Programming: AIA contract allocates about 10% of fee to this phase, basically "Teeing" up project. Get all questions out on table, research and design as much as needed to answer all the fundamental questions. Ones that effect Owner's, wants, needs, delivery date and budget.
- Overview of ADAAG & TAS.
- Reading assignment: *Texas Accessibility Standards Sections* 604, 605, 606 & 609.
- Assignment: Design at ¼ inch per foot scale on 8.5x11 sheet ADA compliant 1-water closet public restroom, due Monday January 23 beginning of class. TAKE NOTES FROM EXAMPLES SHOWN IN CLASS
- Submit 2) paper copies at beginning of class, e-mail 1) PDF by Monday 12:00 Noon, 01-23-17.

WEEK 2 Monday January 23

- Discuss TAS & ADAAG
- Introduce Daycare Center Programming Project:
- Download CAD files into 1 folder for project on student's computer hard drive.
- Overview of Building Code
- Overview of Zoning Ordinances and Design Standards.
 - Perform Code research; identify all codes that will govern the work including zoning ordinances, building codes and accessibility standards.
 - Overview of Zoning Ordinances and Design Standards.
 - Develop list of spaces in excel spread sheet indicating minimum square footage required to meet client's spatial needs.
 - Examine requirements of each space requested by client and develop diagrammatic CAD block of each space, use furniture sizes identified, stated millwork requirements, TAS clearance requirements and IBC Table 1004.1.1 to determine minimum room sizes.

Wednesday January 25

- Diagram Spatial Relationships
 - In Context of site, arrange diagrammatic CAD blocks to organize spaces with respect to Clients needs and circulation needs due to circumstances of the site.
 - Reading assignment: International Building Code: Chapter 3 Use and Occupancy Classification

WEEK 3 Monday January 30

- Diagram Spatial Relationships:
 - Develop site plan, accommodating parking and vehicular circulation and zoning ordinance.
 - Verify City's minimum off street parking requirements, compare with Client's needs.
 - Consider Client's special vehicle circulation needs and how to accommodate those needs.
 - Discuss technical requirements of parking, circulation, driveway approach design and placement and fire department access.
 - Discuss site utilities and how that affects site design and building design.

Wednesday February 1

- Begin Building Code Analysis
 - Calculate building area; IBC 502.1
 - o Identify primary occupancy type.
 - o Identify accessory occupancies.
 - Determine occupant load
 - Determine construction type
 - o Determine allowable area and height, IBC Table 503.
 - Fire Resistive requirements IBC Table 601

WEEK 4 Monday February 6

Finalize presentation

Wednesday February 8

Finalize presentation

WEEK 5 Monday February 13

Present Daycare Center Programs to class

Wednesday February 15

Present Daycare Center Programs to class

WEEK 6 Monday February 20

- Introduce 2nd Phase of Daycare Center Project
 - Develop diagrammatic building plan into measured plan accommodating structural limitations for type of construction determined.
 - Develop roof plan.
 - o Evaluate IECC and its impact on final design.

Wednesday February 22

- Continue developing schematic design documents
 - Refine site plan, consider power, fire line, sanitary sewer, water, storm water, accessibility, fire department access, and grading, continue schematic site design, to scale.

WEEK 7 Monday February 27

- Continue developing schematic design documents.
 - o Architectural Design Data
 - o Site plan
 - o Building plan
 - Building elevations
 - Building section
 - o Roof plan

Wednesday March 1

- Continue developing schematic design documents.
 - Architectural Design Data
 - o Site plan
 - Building plan
 - o Building elevations
 - Building section
 - o Roof plan

WEEK 8 Monday March 6

- Continue developing schematic design documents.
 - o Architectural Design Data
 - o Site plan
 - Building plan
 - Building elevations
 - o Building section
 - o Roof plan

Wednesday March 8

- Continue developing schematic design documents.
 - o Architectural Design Data
 - o Site plan
 - Building plan
 - o Building elevations
 - Building section
 - o Roof plan

WEEK 9 Monday March 13

Spring Break

Wednesday March 15

Spring Break

WEEK 10 Monday March 20

- Project cost estimating techniques.
 - Area take-offs
 - o CSI divisions
 - Material take-offs
 - Project financing
 - Project hard costs and soft costs

Wednesday March 22

Continue material take-offs

WEEK 11 Monday March 27

Develop detailed building cost estimate

Wednesday March 29

Turn in detailed building cost estimate

WEEK 12 Monday April 3

- Introduce Health Clinic Building Program to Class
 - Perform Code research; identify all codes that will govern the work including zoning ordinances, building codes and accessibility standards.
 - Develop list of spaces in excel spread sheet indicating minimum square footage required.
 - Examine requirements of each space requested by client and develop diagrammatic CAD block of each space, use furniture sizes identified, stated millwork requirements, TAS clearance requirements and IBC Table 1004.1.1 to determine minimum room sizes.

Wednesday April 5

- Diagram Spatial Relationships
 - In Context of site, arrange diagrammatic CAD blocks to organize spaces with respect to Clients needs and circulation needs due to circumstances of the site.

WEEK 13 Monday April 10

- Diagram Spatial Relationships:
 - Develop site plan, accommodating parking and vehicular circulation and zoning ordinance.
 - Research City's minimum off street parking requirements, compare with Client's needs.
 - Consider Client's special vehicle circulation needs and how to accommodate those needs.
 - Discuss technical requirements of parking, circulation, approach design and placement and fire department access.
 - Discuss site utilities and how that affects site design and building design.

Wednesday April 12

- Begin Building Code Analysis
 - o Calculate building area; IBC 502.1
 - Identify occupancy type.
 - o Identify accessory occupancies.
 - Determine occupant load
 - Determine construction type
 - o Determine allowable area and height, IBC Table 503.
 - o Fire Resistive requirements IBC Table 601

WEEK 14 Monday April 17

Finalize spatial tabulation and costs estimates.

Wednesday April 19

Prepare colored presentation drawings.

WEEK 15 Monday April 24

Finalize presentations

Wednesday April 26

Finalize presentations

WEEK 16 Monday May 1 DEAD WEEK

Guest Speaker

Wednesday May 3

• Guest Speaker

FINAL GRADE NOT RECORDED UNTIL FOLLOWING IS RECEIEVED:

- 1. 1 set of drawings at presented size
- 2. 1) set of PDFs