ARCH 4356-001 & 5356-001: AUTOCAD
Fall 2014

Instructor(s): ATCHISON, RICHARD

Office Number: ARCHITECTURE BUILDING – MAIN OFFICE

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Faculty Profile:

Office Hours: 7-10PM ON CLASS NIGHT

Section Information: ARCH 4356-001 & 5356-001

Time and Place of Class Meetings: ARCHITECTURE A319 – 7-9:50PM

Description of Course Content: BASIC AUTOCAD – FROM START TO 3D

Student Learning Outcomes: A WORKING KNOWLEDGE OF AUTOCAD FROM WORKING DRAWING ASSEMBLY TO 3D MODELING

Required Textbooks and Other Course Materials: NONE

Descriptions of major assignments and examinations: OFFICE MODEL CAD ASSIGNMENT & 3D RENDERING WITH MULTIPLE GRADING POINTS

Attendance: EACH CLASS WILL HAVE UNIQUE MATERIALS COVERED AND ATTENDANCE IS EXPECTED BUT NOT REQUIRED. THE STUDENT IS EXPECTED TO SHOW PROGRESS AND ATTENDANCE IS THE BEST WAY TO DO SO.

Grading: MULTIPLE PROGRESS POINT GRADES WILL BE TAKEN DURING THE SEMESTER. EACH BULLET WILL BE WEIGHTED ACCORDING BY PERCENTAGE. ITEMS 1-7 ARE 10% OF FINAL GRADE. ITEM 8 IS THE BALANCE TO REACH 100%.
1. INTEGRATION OF EXISTING PROJECT INTO AUTOCAD
2. LAYER MANAGEMENT IN AUTOCAD OF EXISTING PROJECT
3. CONSTRUCTION DETAIL ASSEMBLY AND LAYERING
4. ANNOTATION USING ARCHITECTURAL SHEETS, VIEWPORTS AND DIMENSIONS
5. CONSTRUCTION OF A 3D MODEL
6. APPLYING MATERIALS AND LIGHTING TO MODEL USING 3DS MAX
7. RENDERING USING 3DS MAX.
8. FINAL PROJECT GRADE

Make-up Exams: NOT AVAILABLE

Expectations for Out-of-Class Study: 2-3 HOURS OF AUTOCAD PER WEEK

Grade Grievances: http://catalog.uta.edu/academicregulations/grades/#undergraduatetext; for graduate courses, see http://catalog.uta.edu/academicregulations/grades/#graduatetext.

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/).

Americans with Disabilities Act: The University of Texas at 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)*. 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 that disability. Any student requiring an accommodation for this course must provide the instructor with official documentation in the form of a letter certified by the staff in the Office for Students with Disabilities, University Hall 102. Only those students who have officially documented a need for an accommodation will have their request honored. Information regarding diagnostic criteria and policies for obtaining disability-based academic accommodations can be found at www.uta.edu/disability or by calling the Office for Students with Disabilities at (817) 272-3364.

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.

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 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.

Electronic Communication: 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 an online 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, north & south end of architecture building. Do not use the elevator. 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 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, 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.

Course Schedule
The schedule of the class will be calculated on the speed of the class. Generally all work is due before the next class.

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.

AUTOCAD 2010 SETUP – uta architecture

RICHARD ATCHISON - 817-269-1777

rsa@formsi.com

1. Autocad needs to be default application for .dwg files.
2. AutoCAD options = type "op" on the command line.
   a. Display Tab:
      i. Crosshair size   100
      ii. Fade control xref display   0
      iii. Color scheme   light
      iv. (click) Colors button
         1. 2-d model space – color (black)
   b. Open and save tab:
      1. Save files in: AutoCAD 2010 format. (current industry standard)
   c. User preferences tab:
      1. Right click customization button   turn "on" time sensitive button.
      Click apply and save.
3. AutoCAD system variables:
   a. Units setup – type "units" set to: architectural (all other items okay)
   b. O snap setup – type "osmode" set to: 447
   c. Multi core – type "whipthread" set to"   3
   d. Selection preview – type "selectionpreview" set to   0
   e. Edge mode – type "edgemode" set to   1
   f. Layer isolate – type "layiso" *enter*, type "s" *enter*, type "off" *enter*, type "vpfreeze" *enter*. Press escape to stop command. Setting will be saved.
4. For plotting we need to make a folder and place the (ctb) file in for access by students.
   a. Step 1 – make folder in "c" drive called "acad plt files"
   b. Step 2 – copy folder into file (attached in e-mail)
   c. Step 3 – in AutoCAD type in "op" for options. Under the "files" tab select "printer support file location", expand the selection by clicking the (+). Remove the path and click browse. Path to the new folder in the "c" drive. This should place the location for the (.ctb) file to this location. This will save the student's hours per semester.

Rich

CAD SCALE FACTORS

DRAWING SCALE	1 / 8" TEXT SETUP #	DIMSCALE FACTOR
1 / 60'	8' - 0"	720.00
1 / 50"	6' - 6"	600.00
1 / 40"	5' - 0"	480.00
1 / 30"	4' - 0"	360.00
1 / 20"	2' - 6"	240.00
1 / 10"	1' - 3"	120
1 / 16"	2' - 0"	192
3 / 32"	1" - 4"	128
1 / 8"	1' - 0"	96
3 / 16"	8"	64
1 / 4"	6"	48
3 / 8"	4"	32
1 / 2"	3"	24
3 / 4"	2"	16
1"	1 1 / 2"	12
1 1 / 2"	1"	8
3"	1 / 2"	4
6"	1 / 4"	2

FORM studios, inc.

240 E Renfro Street | Suite 203

Burleson, TX 76028

DIMENSIONS IN AUTOCAD:

24'7-1/2

24'7.5

295.5

THE DEFAULT UNITS IN AUTOCAD IS INCHES. YOU DO NOT HAVE TO TYPE THE SYMBOL FOR INCH.

LAYER STANDARDS
FORM studios, ARCHITECTURE

COLOR	WIDTH	DESC
8	0.067 MM SCREENED 50%	SCREENED, HATCH FOR: LINES IN DISTANCE, HATCH, SMALL DETAILS, DOOR SWINGS.
13	0.187 MM	VERY FINE FOR: LINES IN DISTANCE, INTERIOR FEATURE DETAILS HATCH, ELECTRICAL EQUIPMENT, DOORS & WINDOWS, FLOOR PATTERNS.
213	0.187 MM	DIMENSIONS (ONLY)
150	0.25 MM	FINE WINDOWS & DOORS & TEXT
150	0.25 MM	FINE DEFAULT LINE WEIGHT – GENERAL LINE WORK.
31	0.35 MM	MEDIUM FOR: OUTLINES OF EQUIPMENT, OUTLINES OF OPENINGS, GENERAL PERIMETER OUTLINES.
254	0.5 MM	HEAVY FOR: WALLS, OUTLINES.
50	0.7 MM	VERY HEAVY – SECTION CUTS FOR: SECTION CUTS, EARTH LINES, DETAIL BOXES.

MEETS AND BOUNDS — @100.00'<N30D47'13"W

SHEET SETUP IN AUTOCAD

1. OPEN FILES
   a. YOUR SOURCE
   b. PAPERSPACE BLOCKS
   c. ARCH D BORDER FILE.
2. SAVE AS SOURCE FILE FOR SHEET TO PRESERVE SETTINGS ONLY.
   a. A2.01 SERIES _LAST NAME_FALL2013.dwg
3. EDIT THE BORDER FILE, SAVE & CLOSE.
4. SHEET FILE – SET CURRENT LAYER TO '0"
5. XREF BORDER INTO PAPER SPACE
6. COPY AND PASTE THE PAPERSPACE BLOCKS INTO BORDER AREA.
7. XREF THE SOURCE FILE INTO MODEL SPACE
8. SET LAYER TO "DEFPOINTS'
9. PAPER SPACE - CREATE VIEWPORTS USING THE "MV" COMMAND
   a. DRAW 4 VIEWPORTS.
   b. COPY THE DRAWING TITLE FROM THE PAPERSPACE BLOCKS
10. COPY THE SHEET TO CREAT A2.02 ON THE TABS AT THE LOWER OF SCREEN.
11. SET VIEWPORT SCALE ON EACH SHEET, ON EACH VIEWPORT. SEE THE PAGE #6 IN SYLLABUS HANDOUT. PAGE A2.01 – LARGE SCALES, PAGE A2.02 – SMALL SCALES
12. LOCK THE VIEWPORTS
13. CREATE LAYERS FOR ANNOTATION
    a. 0 10 TEXT LG
    b. 0 10 TEXT SM
14. MAKE THE "AEC_ARCH_1" THE CURRENT DIMSTYLE
15. SET THE DIMSTYLE TO MATCH THE VIEWPORT SCALE.
16. ANNOTATION:
    a. 100 LEADERS TOTAL ON BOTH PAGES, MAX USE 3 TIMES
    b. 100 DIMENSIONS TOTAL ON BOTH PAGES
       i. MAKE SURE YOU USE THE PROPER LAYER LG FOR A2.01 SM FOR A2.02.