UNIVERSITY OF TEXAS AT ARLINGTON
ARCH 5343 ARCHITECTURAL GRAPHICS II
INSTRUCTOR: TOM RUSHER

SCHOOL OF ARCHITECTURE
(DIGITAL MEDIA)
SPRING 2015

SYLLABUS

Office Location: Architecture Building 103B
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Email: trusher@uta.edu
Office Hours: By Appointment

Room: ARCH 324

Times: T, TH (SECTION_001 9:00 AM- 11:50AM)

Prerequisites: Graduate Student in the School of Architecture

Required Text Books: AutoCAD 2014 & 2014 LT No Experience Required
By: Donnie Gladfelter

Course Description:

The Digital Design Communication Class is an **introductory** digital design course that strives to develop visual sensitivity and awareness of digital techniques enabling students to present ideas graphically. This is a survey course that focuses on general exposure to computer visualization software from 2D Vector and 2D Raster programs to an introduction to 3D modeling using a "conceptual" modeler. Emphasis is placed on the relationship of digital skills with the graphic communication of ideas.

The class investigates the nature of the Digital Realm as an environment to advance & enhance the visualization of design concepts while presenting them in a graphically sophisticated fashion. Emphasis is placed on a student's ability to present ideas explicitly, graphically, and orally. Close attention to the "craft" of Digital Works both in a pure digital environment and as printed media will be explored. The objective of the class is to introduce and expose students to a range of Digital tools while leveraging them to communicate design ideas. This class presupposes some **general** familiarity with computers but not with the software being utilized. Exploring different program types for their particular strengths and understanding the value of each is leveraged.

Reading Assignments: A series of reading assignments, articles, and/or tutorial exercises will be handed out or assigned from the required text books throughout the semester that pertain to particular issues being discussed in class. It is expected that students read the materials and run through the tutorials by the next class period. A Reading list will be given for certain readings.

Class Structure

The Class will be run as a Lecture/Lab, where work will be done both in class and outside of class. The class is also predicated on strong student/instructor interaction in order to advance complex design ideas as they relate to the digital realm and acquire the software skills needed for successful completion of the class. It is vital that students attend regularly and be present both physically and intellectually by asking relevant questions, being engaging and honoring the ethical contract between student and professor, which entails sincerity on the part of the student and the want/desire to learn and expand your knowledge base.
There are **four** major components to the class, Lecture, Implementation Labs, Application/Synthesis Project(s), and Instructor Evaluation.

Lecture:

Lectures will range from demonstrations of software tools & environments, to compositional strategies and design concepts. On occasion examples will be presented for exposure and visual instances of archetypes and contemporary design principals. It is critical that students develop good note taking, (sketching), and listening skills as it is recommended that students do so during lectures. Critiques will occur both at work stations and in group settings and students are expected to be prepared w/ prints and/or digital images in JPG format on a flash drive for presentation at the beginning of class. Class Presentations in both Digital and Print Media will be scheduled to engage students, GTA, and professor in dialog regarding possibilities and avenues of exploration. If you do not have your print/image at the beginning of the class period, we will look at those that are prepared for class and take note of participation by students. Students that regularly participate will perform better w/ the instructor evaluation grade.

Implementation/Labs:
Exercises

The Implementation Labs portion of the class consists of a series of short **Exercises** intended to focus on skill development, software acquisition, and computer proficiencies. Thursdays are designated as Lab days unless otherwise noted by the instructor. All digital exercises **will** be picked up either at the end of the class or on the following class period as specified by the instructor.
You will either receive full credit, (100)/ (85), or partial credit, (75) for having **COMPLETED** an exercise in an excellent, good, or satisfactory manner, (respectively) **and on time** depending on the quality of the presentation. Poorly presented work will receive a (60) and **no credit** will be given for assignments that are submitted late, not submitted, or substantially incomplete. Format will be very specific per exercise. The implementation exercises are for the students benefit to "tool up" for the Major Project(s). Most exercises will be conducted in class during the designated Lab day and due at the end of the period. A general rule is that each exercise counts for one grade but in certain instances, more complex exercises or exercises that entail more time may count (x2 or x3). (Instructors discretion) It is also expected that students become proficient in the particular software being taught to the degree of a basic-intermediate level user by the end of the class. In addition, **Evaluation** exercises will be conducted periodically to test the proficiency of the students that will count for (x2 or x3). (Instructors discretion)
All work will stop 20 min prior to end of class for printing. NO EXCEPTIONS.
You print where you are in the exercise for submission. Your name, class number, semester and section number should be in the lower right hand corner of your print.

Missing a Lab Exercise or Evaluation Exercise can NOT be made up.

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Class Structure Cont.

Implementation/Labs:
Exercises

The Lab Exercises will count for **60%** of your total grade. If you miss class on one of these days and the exercise is due on that day, you may **not** make up the submission unless you have an **excused absence**. If you arrive late, you may submit what you can complete by the designated stop time for printing. If you have an excused absence and the exercise is due on the following class period it will be accepted on receipt of the proper documentation. Exercises will **not** be accepted late. This means that any work not submitted will receive the appropriate grade of Zero. Typically there are from 5 - 7 Exercise grades.

Application/Synthesis
Major Project(s)

This portion of the class consists of a project(s) that incorporates the knowledge and skills attained from the Implementation Labs/Lecture/Critique portions of the class and are then synthesized into a more complex **Project**. The principle of this Major Project(s) is to demonstrate applied knowledge and skill attainment from the development phase while expanding on skills/design ideas. This portion of the class will count for **30%** of your total grade. Students should be able to demonstrate a mastery of the digital tools being taught, a clear understanding of project design objectives, and a developed graphic sophistication.

Sequencing:

Projects at times will overlap w/ exercises in order to tie in certain principles simultaneously and establish stronger links w/ the Implementation Labs. Design is not a linear process but rather a back and forth structure of conceptualizing, assessment and reassessment. We will practice this notion in the class by incorporating previous skill sets w/ new ones being acquired in the application/synthesis portion of the class.

Definitions:

Application as it pertains to this class is the process by which creative and intellectual advances occur. Students will run through a series of staged analytical and conceptual projects to develop a sensibility to the digital and its relationship to visualization, design, and communication of ideas.

Synthesis as it pertains to this class is the culmination of design, analysis, and digital skills applied and the demonstration of applied knowledge and skills to conceive new design possibilities.

Instructor Evaluation:

The Instructor Evaluation portion of the class is based on student development throughout the semester, attendance, and class participation. Class participation entails intelligent discussions concerning project topics, design possibilities, and student design concepts. The professor/GTA will take note periodically throughout the semester of a student's progress/participation, levels of engagement, and overall improvement. This portion of the class will count for **10% of your total grade.**

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Attendance Policy:

Regular Attendance is **required to pass** the class. You are allowed **2** absences total for the entire semester including Lecture/Critique and Implementation Labs. You are considered absent if you leave the class earlier than its designated ending. You are considered absent if you arrive late and do not inform the professor/GTA. It is your responsibility to be sure you are logged in as present.
If you miss more than 2 days **for any reason**, you should consider dropping the course. *Absences and tardiness **will** affect your instructor evaluation grade.* If you miss a day, it is your responsibility to get class notes/handouts from a classmate. *If you have an excused absence, please show up to class the next class period w/ the proper documentation to substantiate the absence and give it to myself or the GTA. **I will not accept** documentation past the next class period unless you speak w/ me and clarify the situation ahead of time.* You have signed up for a particular section and you are expected **to attend that section only**. If you miss class at your designated time, attending another section habitually will not be allowed nor will it count as being present.

Tardiness Policy:

Attendance will typically be taken at the beginning of class. If you are late, **you must** inform the instructor/GTA of your presence in order to be counted as present. Arriving late is a disruption to the class as a whole and will be noted by the instructor/GTA. After your second tardy, **the third** will constitute an unexcused absence, and each tardy after that will also constitute an unexcused absence.
If you do come in late, please make sure you do not let the door slam but rather gently close it. Class begins at the designated time….**Sharp**.

Drop Policy:

You may drop this course with a grade of W at any time prior to and on the final drop date. See your Course Schedules for dates.
You are completely responsible for dropping yourself.
The instructors cannot drop a student from the course for **any** reason.

Note on Printing:

Printing is solely the responsibility of the student. Exercises in most instances are designed to be printed here at the SOA **prior to class or at the end of a Lab session**. Color printing may be performed in the ARCH 324/319 computer labs, in the downstairs ARCH 103 computer labs, in the SOA Library, at Home, etc. If a project is asked for in color, it is **the responsibility of the student** to submit it in the appropriate format (color) and time for full credit on an exercise. The media/paper type does affect the print quality and it is at the sole discretion of the student to select the media/paper type. Your grade is dependent on the legibility of the submission. Note that images on the screen and prints are two separate types of visual materials. 40lb+ paper and satin/photo glossy paper tend to read better. No printing will be allowed during class time during the lecture and all exercises are due at the designated times. **No Exceptions.**

***Make Up Work:**

Exercises** should be completed by the end of class or on the next class period, unless otherwise specified. ***No make up work will be accepted for Exercises.
***Major Project(s)** will **NOT** be accepted late and are due on the specified due date.

Any exercise or project not submitted will receive a grade of **0, so submitting something rather than nothing is always preferable. Having stated the above, significant incompletion will also warrant a **0**.*

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Grading Structure

Exercises:

Check ++	=100
Check+	= 85
Check	= 75
Check -	= 60
No Submission/ Incomplete/Late X	= 0

Major Projects:

A+	= 100	B+	= 89	C+	= 79
A	= 95	B	= 85	C	= 75
A-	= 90	B-	= 80	C-	= 70
D+	= 69	F	= 55		
D	= 65	No submission= 0			
D-	= 60				

Grading Definitions

A Excellence
- A clear understanding of most graphic, digital, and design concepts being investigated
- Student demonstrates an exemplary competency with digital media taught during the semester
- A Refined graphic sensibility that surpasses expectations of a project

B Above Average
- A good understanding of most graphic, digital, and design concepts being investigated
- Student demonstrates above average competency with digital media taught during the semester
- Graphic presentation is above average and exceeds the required aspects of a project

C Average
- Student demonstrates a satisfactory understanding most graphic, digital, and design concepts being investigated
- Student demonstrates competency with digital media taught during the semester
- Student's graphic presentation is typical of students at this level and meets the required aspects of a project.

D Below Average
- Student demonstrates some understanding of some graphic principles/concepts being investigated but is below the average of students at this level
- Student demonstrates a partial understanding of digital media being taught during the semester and needs improvement
- Student's graphic presentation is below the average of students at this level and needs some improvement

F Failing
- Student demonstrates a lack of understanding of graphic, digital, and design principles being investigated
- Student demonstrates a lack of understanding of digital media being taught during the semester
- Poor/Unsatisfactory Graphic Presentation for this level and needs significant improvement

Backing up Digital Work:

Always have **three** back ups. Images and digital models left on any computer hard drive or on the network could be lost. It is **your** responsibility to back up work on a regular basis. Always save your work periodically. Computers do crash and networks periodically go down.

All data left on the C: Drive will be erased after the computer restarts or after you are log out. This includes after a power outage, if the computer is unplugged, or if it crashes. **BACK UP, BACK UP, BACK UP**

Turning in Digital Assignments:

You should purchase a several CD-R's for Backing Up and Turning in of Digital Materials.

School of Architecture Laptop Policy

The School of Architecture will requires each student in the Architecture (B.S. Architecture) and Interior Design (B.S. Interior Design) undergraduate majors, the Paths A, B, & C Architecture (M.Arch) graduate program and the Landscape Architecture (M.Landscape Arch) program to have a personal laptop computer **configured to the School's specifications**. This requirement responds to the changes in the professions of Architecture, Interior Design and Landscape Architecture resulting from the widespread adoption of computer technology in recent years. Please refer to the School of Architectures Web Page for Specifics on Laptop Configurations.
http://www.uta.edu/architecture/admissions/laptop.htm

General Hardware Specifications

This specification emphasizes performance over any particular manufacturer or brand. Please note that two standards (minimum and recommended) are often specified.

CPU Type:	Intel i3 or AMD Turion II (Intel i5 or better / AMD Phenom II or better) The more processors, the faster the computing power of your laptop. *Also, you **should** have a 64 bit operating system in order to take full advantage of any dual core + processors)*
Speed:	Minimum Speed 2.1 GHz required (2.6GHz + recommended)
RAM:	2Gig minimum required; (4GB recommended) (More RAM = Faster Speeds)
Hard Drive:	320 GIG, 7200rpm required (500+ GIG recommended)
CD/DVD RW:	CD/RW + DVD/RW required
Screen size:	15" min required; (17" recommended)
Graphics Card:	512 MB minimum required*; (1GB recommended)
Ethernet:	Integrated 10/100Base-T Ethernet LAN required
Wireless:	Integrated 802.11b/g/n required
USB:	USB 2.0 required (USB 3.0 recommended) (USB 2.0 is still the standard but USB 3.0 is much faster)
Operating System:	Windows 7 Home, Deluxe, or Professional, required (64 bit processing will take advantage of dual, tri and quad core performance)

*verify video card compatibility w/ the Autodesk Website at: http://usa.autodesk.com/adsk/servlet/cert?siteID=123112&id=16391880
It will have you choose, the product, (AutoCAD 2012), Your Operating System, (Window 7 64 bit), and Video Card Vendor. It will give you certified and recommended video cards for your laptop. The better your video card, the less refresh issues you will have.

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Required Peripheral Hardware:

One External USB 3 Hard Drive w/ a min of 1TB of Storage space
You will be either working off of this drive or using it as your Primary Source for backing up your work.

One USB 2 or 3 Flash Drive with a min. of 8GB used for backing up/transferring files. **Never work off of your Flash Drive.**

Software Requirements

Autodesk's AutoCAD 2014
Adobe Photoshop CC
Form Z 7.3.3

AutoCAD 2014

Be sure to get **AutoCAD 2014** and **NOT** one of the specialty AutoCAD software like AutoCAD Architecture, Civil, Plant 3D, MEP, etc. We will be working in the non-specialized General Purpose AutoCAD for flexibility.

If you go to the **http://students.autodesk.com** you may join the Autodesk Educational Community and download the software for **FREE.**

Photoshop CC

On the **journeyed.com** website the prices are:
Photoshop CC ($239.88) The way Adobe distributes it's software now it through the Cloud. If you get the Creative Cloud, you have access to all of the Adobe Imaging software from Photoshop to Illustrator to Premiere Pro.

http://www.journeyed.com

FORM Z 7.3.3

Form_Z 7.3.3 may be downloaded for **FREE**. It is recommended that you download the program at the beginning of the semester and **NOT DOWNLOAD** the trial version.

Get the Full Student License right away to avoid technical issues later w/ upgrading from the trial version. They will email you a code to make it a one year licensed copy.

http://www.formz.com

Also, be sure to turn off virus protection when you are loading up your software. Virus protection on might create a corrupt install.

Downloading the software and loading it on your laptop IS OPTIONAL!!

You have the software in the labs to use and installing software is not part of the scope of the class. If you choose to do so, you will have to do it outside of class.

It is recommended that you work in the computer labs when possible.

Software Piracy

Software Piracy: the taking and using of copyrighted or patented material without authorization or without the legal right to do so.

It is the policy of the University to ***not*** tolerate software Piracy. Software at student rates is available at various On Line Sites with Student Discounts. It is the responsibility of the student to purchase and maintain legal copies of all required software for this class. **No Exceptions.**

Third Floor Architecture Computer Lab hours of Operation: *Monday-Sunday 8AM-2AM*

Academic Integrity

Students enrolled in this course 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.

Americans with Disability Act

The University of Texas at Arlington is on Record as being committed to both the spirit and letter of federal equal opportunity legislation: reference Public Law 93112—The Rehabilitation Act of 1973 as amended. With the passage of the new federal legislation entitled Americans with Disabilities Act – (ADA), pursuant to section 504 of the Rehabilitation Act, there is renewed focus on providing this population with the same opportunities enjoyed by all citizens.

As a faculty member, I am required by law to provide **"Reasonable Accommodation"** to students with disabilities, so as not to discriminate on the basis of that disability. Student responsibility primarily rests **with informing faculty at the beginning of the semester and in providing authorized documentation through designated administrative channels.**

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Cell Phones:

ALL cellular devices are to be turned **OFF** during class. Not on Vibrate, or low volume but OFF.

For notes, you should write them down manually. Cell phones are a distraction to other students in class and as a mater of policy while in class you should have it **OFF**. If you need to make a call, please quietly excuse yourself at an appropriate time and make the call outside of class.

NO Pictures of notes on the board will be allowed. You should sketch and/or write the materials down, **BY HAND IN A NOTEBOOK.**

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.

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.

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 [insert a description of the nearest exit/emergency exit]. 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.

Other Information

Use of aerosol materials, paints, and other hazardous chemicals: Due to health and safety regulations and University policy, no spray paints, adhesives and other hazardous aerosol products are allowed in the building. Furthermore, no painting or use of flammable or other hazardous chemicals is allowed anywhere in the building, including and especially the fire stairs. Use of such chemicals is a hazard to your health and safety and that of other building occupants. It is also against the law. Spray painting and similar activities are only permissible in the approved ventilated spray booths in the School Shop. Violations of this policy will be subject to both academic and civil penalties.

You should bring your architects scale to class to check certain exercises prior to submission as a print will typically be at a specific scale and printing at the wrong scale is incorrect and will affect your grade.