ID 4823 Syllabus

4/11/26

Advanced Digital Rendering & Presentation, 3 Credit Hours

3:30pm – 4:45pm, Tuesday & Thursday, Location TBD

Instructor	Email	Office Hours & Location
Stephen Chininis	schininis@gatech.edu	by appointment only - Room 254 ARCH W or online

General Information

Course Description

This class will focus on developing advanced, traditional (not 3D CAD) drawing skills, that are enhanced by digital tools for renderings and presentations. Starting with advanced digital sketching using analog drawings, the course will explore new forms of presentation. With new mobile digital tools, it is now possible to quickly develop many iterations of design ideas and concepts. We will also explore storytelling and interactive product design presentations that inform better than the traditional techniques.

Pre- & or Co-Requisites

There are no pre-requisites, however to benefit most from the class I recommend students be Sophomore level or above, and have a basic understanding of drawing in perspective.

Course Goals and Learning Outcomes

This course has been designed to emphasize the strategic importance of time efficient advanced drawing and visual communication skills and techniques throughout the design process. The course is structured to teach by example. The materials are organized and presented in a step-by-step style consistent with a professional designer's approach to advanced rendering techniques in order to provide students with an understanding of how to better leverage and hone their own skills. Techniques for enhancing hand drawn sketches using digital tools will be explored.

Note: This course is intended for design students who already have some experience with basic design drawing and fundamentals, but who wish to add new digital presentation skills and techniques to their toolbox.

After the successful completion of this course you will be able to:

Demonstrate knowledge, skill, and abilities in the appropriate use of an extensive range of advanced techniques including:

Composition:
- Framing elements, understanding position of viewer
- Using contrast and other dimensional drawing techniques

Rendering:
- Organic form and geometric form sketching
- Rapid ideation techniques, minimal drawing
- The importance of line quality
- Study of composition
- Study of dimensional drawing techniques

Digital:
- Cintiq and Photoshop rendering
- Workflow for iPad and other drawing tablets
- Using Rendering as a presentation tool
- Exploded view renderings to convey information
- Using multiple views and storytelling in renderings
- Clear and concise layout, efficient communication of ideas
- Ability to adapt advanced analog drawing skills to digital applications in order to effectively work back and forth between analog and digital realms.

Animation:
- Using animation to show product interaction
- Using video as a concept Sketch Tool

Video:
- Using storyboards to organize content and to design the presentation
- Quick simple edits to make dynamic video
- Mocking up user interfaces or app designs using video
- Simple models in videos to tell a user interface story
- Editing video to make a dynamic product presentation
- Understanding the "Kickstarter style" video presentation model

Future Tools
- Investigating the latest technology to see what new presentation techniques are possible
- Using iPads, Surface, and new applications to explore workflow

Course Requirements & Grading Components

Grading Scale

Your final project grade and course grade will be assigned as a letter grade according to the following scale:

A = 90 to 100	B = 80 to 89	C = 70 to 79	D = 60 to 69	F = 0 to 59
Exceptional	Average +	Average	Average -	Average -, Late, Incomplete, or un-submitted

Instructional methods for teaching the course include:

- Lectures and Demonstrations
- In class and homework and drawing Assignments
- Readings and In-class Group Discussions
- Desk and Group Critiques

Evaluation Criteria

Each project will be graded on a 100 point scale consisting of the following graded components.

Drawing Assignments: Perspective and Ellipses 20%, Composition 20%, Shading 20%, Line Quality 20%, Creativity 20%

Grading Component	Weight	Duration
1) Dimensional Life Drawing & Composition	5%	1 week
2) Digital Rendering & Perspective / Hard Drive	10%	1 week
3) Using Ellipses / Vase	10%	1 week
4) Set of Five	15%	2 weeks
5) Sketch Background	10%	1 week
6) Studio Project	10%	1 week
7) Motion Graphics or Animation / Human Element	15%	3 weeks
8) Automotive Rendering	15%	3 weeks
9) Attendance and In-class Participation	10%	

Description of Graded Components

Project 1: Dimensional Drawing & Composition: Pencil drawing showing as much depth as possible.
Project 2: Dimensional Drawing / Hard Drive: Study of composition and using Photoshop techniques combing analog drawing with digital shading
Project 3: Vase: Developing good line quality to scan and use, using the correct ellipses and perspective
Project 4: Set of Five: Using an underlay page to create a great set of concepts without extra work
Project 5: Sketchy Background: use sketches as a background to enhance a rendering.
Project 6: Studio Project: Use a current project or one from your portfolio and develop a presentation sketch
Project 7: Animation or Motion Graphics or Human Element: Storyboard an action you want to animate.
Human Element - Create a product sketch showing how the product relates to human scale.
Project 8: Automotive Concept Sketch in perspective with correct proportions

Throughout the class we will review basic, drawing and design skills and techniques:

Line drawing – line describing form surface (contour lines), singular and multiple rounding, intersecting cylinders
– line describing form in transition (ribs and stringers) – line describing light, shade, and shadow
– line describing surface texture (material indication) – line describing background, intuitive sketching
– adding product details and graphics – Light, shade, and shadow (lighting conventions)

Hybrid Drawing – drawing and scanning for digital enhancement – composition and using type and logos
– optimal output of digital work

Presentation Skills – understanding simple animation principals – public speaking techniques
– adapting modern tools to redefine presentations

Video Editing – using movement and composition in video – timing and storyline construction
– composing, scripting, and creating video – storytelling using video

Extra Credit Opportunities

For this course extra credit is possible one time for each assignment, but requires a meeting with the instructor ahead of time to set up a plan and so I know to regrade the assignment. Each assignment is graded on a 100 point scale. If, after getting a grade on an assignment a student wants to try for extra credit, they may rework the assignment. Extra credit of up to 3 points per assignment is possible. If for example you get an 86 on an assignment, you may redo the assignment to get a score on that assignment of up to 89. Each assignment can only be redone one time.

All work must be submitted to Canvas and also printed to be available for in class critiques

Required Course Materials

Course Text There is no assigned course text. These books however are all recommended reading:

Design for the Real World / Victor Papanek
Manufacturing Processes for Design Professionals / Rob Thompson
The Design of Everyday Things / Donald A. Norman
Emotional Design / Donald A. Norman
Less and More / Dieter Rams
Additional book list here:
https://www.fastcompany.com/1292961/30-most-important-books-product-designers

Students are also encouraged to visit these other website resources:

Design Info:

Industrial Designers of America	IDSA.org
Core 77	core77.com
Corofolot	coroflot.com
Sketch-a-day	sketch-a-day.com
leManoosh	lemonoosh.com
Converge Diverge	converge-diverge.tumblr.com

Make Info:

Instuctables	instructables.com
Ponoko	ponoko.com
Shapeways	shapeways.com
Make	makezine.com
3D Hubs	3dhubs.com

Course Website and Other Classroom Management Tools

Canvas Software may be used to help manage this course. All assignments will also be available in printed form. If you have any questions about your grades or assignments feel free to email instructor for clarification.

Course Expectations & Guidelines

- This course requires your active participation and collaboration. The instructor will serve as a moderator, encourager, and critic.
- Students will be required to be self-direct and self-motivated.
- Desk Presentations: **Students are expected to continually update their progress** by pinning new work on their wall at the start of class and to maintain a professional standard of presentation in their studios at their desks, such that any faculty or student could stop by at any time and easily understand or engage in the work-in-progress.
- Questions not asked are questions not answered. So: **ASK!** This course is interactive.
- Studio attendance and involvement are mandatory and key to your success in this course. Working in the studio is essential to receiving feedback from instructor and peers. It also builds a professional community of practice. Make the studio space YOUR space and a nice, clean, organized working environment. **KEEP YOUR STUDIO CLEAN and INSPIRATIONAL!**
- Feedback will be direct and honest, aimed at your process and product – not at anyone personally. Talk in depth with the instructor about clarification or explanation. Don't get attached to the results.
- Students are required to document every project in the course. Documentation guidelines used to submit last semester work needs to be used to submit work this semester. If you have questions please ask the instructor.
- There may be some last-minute updates or revisions to projects. Students need to check email accounts on a daily basis to stay informed. If you have any questions please ask the instructor. It is up to you to stay informed if you have questions.
- Some days, class will end early, others may run late. Review/critique days can be particularly long, depending on the number of presenters. Let your instructor know if you have a prior obligation or conflict.

- Students should be aware that making prototypes of their product concepts often cost money. 3D printing in particular is not always free, and can cost quite a lot depending on the size of the components. There are places on campus that 3D print for minimal costs, but there is often a line due to demand.

Academic Integrity Statement

Georgia Tech aims to cultivate a community based on trust, academic integrity, and honor. Students are expected to act according to the highest ethical standards. For information on Georgia Tech's Academic Honor Code, please visit http://www.catalog.gatech.edu/policies/honor-code/ or http://www.catalog.gatech.edu/rules/18/and https://policylibrary.gatech.edu/student-life/academic-honor-code

Any student suspected of cheating or plagiarizing on a quiz, exam, or assignment will be reported to the Office of Student Integrity, who will investigate the incident and identify the appropriate penalty for violations.

PLAGIARISM IN DESIGN: In the process of design, we often deal with many ideas and solutions, and it is possible to accidentally design something that is similar to a prior design. If your design is clearly the result of your own investigation and ideas, that is not considered plagiarism. However, if your design is the result of copying other designers work, using an existing product, or unmodified AI, it is not original work. Please be. aware that you may be asked to show your developmental work to support your design ideas. You must be. able to show how you arrived at your solutions.

AI Policy

For this class Artificial Intelligence can be used in the design process, if it is used ethically. Since all AI is based on the sampling of previously developed work, it cannot be used to create whole ideas that are put forth as unique ideas by the designer. However, if it is used to assist the designer to complete part of a design task, then its function is not unlike spell check, and it is fine. In other words you cannot ask AI to design a whole product, just like you can't ask AI to write a book for you and then claim it as your own work. You could ask AI to help you correct perspective in a drawing, or to do something like modify a sketch you did to show a version of your idea with softer corners. As long as the AI is used as a tool to help you convey your unique idea, it is fine. It is not ethical (or effective) to use AI to generate whole ideas. It is also very easy to recognize when someone is trying to do that. **Using AI to generate whole works will be seen as plagiarism and will result in a grade**

zero.

Accommodations for Students of all Abilities

If you are a student with learning needs that require special accommodation, contact the Office of Disability Services at (404)894-2563 or http://disabilityservices.gatech.edu/, as soon as possible, to make an appointment to discuss your special needs and to obtain an accommodations letter. Please also e-mail me as soon as possible in order to set up a time to discuss your learning needs.

Student-Faculty Expectations Agreement

At Georgia Tech we believe that it is important to strive for an atmosphere of mutual respect, acknowledgement, and responsibility between faculty members and the student body. See http://www.catalog.gatech.edu/rules/22/ for an articulation of some basic expectation that you can have of me and that I have of you. In the end, simple respect for knowledge, hard work, and cordial interactions will help build the environment we seek. Therefore, I encourage you to remain committed to the ideals of Georgia Tech while in this class.

Campus Resources for Students

There are many great resources around campus that can help you if you are having a difficult time with this or any other course. Please search this page for help. Click here or go to:
http://ctl.gatech.edu/sites/default/files/documents/campus_resources_students.pdf

Attendance and Participation Policy

Attendance - Students are expected to attend and participate during each class session. If you know that you will miss a class due to an excused absence, please advise your instructor at least 24 hours in advance so that you can get all assignments and keep current with the class work.

Warning: Your class grade will be reduced by one letter grade if you have more than 3 unexcused

absences. Your class grade will be reduced by an additional letter grade for each additional unexcused absence past 3.

Late Arrival - Students are expected to arrive on time to class. Any student arriving from 5-20 minutes late will be considered tardy. Being tardy 2 times = one absence. Students arriving more than 20 minutes late will be considered absent.

Participation - Students are expected to attend and participate during each class session. Participation means being actively involved in the activity of the class.

Extensions, Late Assignments, & Re-Scheduled/Missed Exams

If any assignment is turned in late it will be reduced by 2 points per day. No assignment will be accepted past three weeks without prior accommodations from the Dean of Students.

Contact info: Dean of Students https://studentlife.gatech.edu/ 404-894-6367 They will help you with medical and personal emergencies. They will email your faculty with approved absences or extensions.

Students are expected to complete any assigned readings and come prepared to each class. Deadlines for all assignments and projects will be specified when they are given. Any in-class assignments will be due by the end of class unless otherwise specified. In-class activities may only be made up if you are absent for a valid reason. The instructors reserve the right to change the dates and modify assignments as necessary, with advanced notification.

Additional Course Policies

Beverages in reusable containers are allowed in class. Please don't bring food unless you are prepared to share with the entire class :)

Student Use of Mobile Devices in the Classroom

The use of mobile phones and computers is allowed for this course but should be kept to a minimum. DO NOT TAKE CALLS while in class. Emergency calls can be taken if you leave the room. You can use devices to take notes, or to record, but make sure that all sound is OFF. Also, please keep in mind that when we have speakers, it is polite to remain attentive. Please take notes, but do not check your social media or work on other projects.

"The College of Design (COD) community of faculty, staff, and students aspires to create and nurture an environment that is supportive of all backgrounds where different views and ideas are respected and encouraged. We encourage intellectual inquiry and a respectful exchange of ideas"

Archive Portfolio Requirement

At the end of the semester students may be required to provide a printed poster or other class material for LaunchPad. Students may also need to make their work available in the future for school displays. Your work should be documented in a way that makes it easy to use it in your own portfolio. Please get in the habit of saving and documenting your work. Students are encouraged to use their work to enter competitions on and off campus. Your work is your intellectual property and you are free to post your work on your own web site, and on other ID websites like Behance, Core 77, etc. As an undergraduate you own the rights to your work, an it can be used in the future as you wish, including the formation of a Startup through programs on campus like Create-X.

Contacting the Instructor for an Appointment

If you would like to arrange a meeting or appointment, please speak with the instructor after class or contact the instructor via email. Please allow 24 hours for a response.

This syllabus may be subject to change during the course of the semester. If changes are made, the syllabus will be updated online and you will be informed of the changes.