ID 3824 and ID 4624 Syllabus

4/7/26

Industrial Design Vertical Studio / 4 credit hours - Summer Semester 2026

9:30am - 12:15pm, Monday-Tuesday-Wednesday-Thursday, Arch W - Sophomore ID Studio

Instructors	Email	Office Hours & Location
Stephen Chininis	schininis@gatech.edu	by appointment only

Course Description :

This product development studio course provides students with a structured approach to learning creative methods for researching, analyzing, prototyping, and developing new product solutions in a variety of areas.

Students will learn creative problem-solving methods applied to new product development and for evolving improved product-user relationships. Senior students are expected to incorporate all facets of the ID curriculum to integrate issues of process, innovation, production and presentation.

This course will emulate the professional studio atmosphere. Working during studio will be expected. Students will have direct contact with our "clients". At times students will work individually, and at other times in groups, in the same way that happens in a traditional industrial design studio. Projects may overlap and students will occasionally be working on multiple projects at the same time.

Course Objectives :

Upon completion of the course students are expected to demonstrate knowledge, skill and abilities in the following areas:

- Comprehensive understanding and application of the iterative design process.
- Apply research methods and analyze data to inform design decisions and validate design outcomes.
- Generate product concepts by combining digital and analog design methods.
- Demonstrate prototyping skills and assess fitness of design ideas
- Ability to partner with other people and technologies to expand solution reach.
- Use of digital tools for design and fabrication.
- Ability to work with external sponsors
- Ability to apply a range of design processes to solve a variety of design problems
- Advanced ability to generate concepts, develop designs, test and refine designs.
- Ability to engage in open-ended problems and produce tangible outcomes.

Course Format:

Instructional methods for teaching the course include:

- In-person attendance required, some synchronous online lectures may be available via MS Teams
- Group and individual projects
- In-class demonstrations and workshop sessions
- Presentations and project reviews
- Readings

Studio sessions, may include a combination of project production, one-on-one/group tutorials, and desk critiques

Weekly Learning Activities:

- Lectures and Workshop sessions (2-4 hours)
- Assignments (8-10 hours)
- Total (12 hours)

Grading Policy and Weighting

Combined Junior ID 3824 and Senior ID 4824

This studio is a joint Junior and Senior level studio. There will be additional requirements for Senior level students. Differences will be outlined in the assignment sheets.

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

90 – 100% = A Exceptional work
80 – 89% = B Above average work
70 – 79% = C Average work
60 – 69% = D Below average work
0 – 59% = F Below average work, consistently late, incomplete, or un-submitted work

Grading will be based on the Georgia Institute of Technology system. No plus or minuses will be applied to the final grade. However, plus and minuses may be used for all the submissions during the semester. Students will have one week after each project grade submissions to discuss any grading matters to the instructor.

Evaluation Criteria

Each project will be graded on a 100 point scale consisting of the following graded components. Deductions will also be taken whenever specific assignments are turned in incomplete or late. Each final presentation will be evaluated using this or a similar project grade sheet:

Grade Sheet:		Expectations Not Met			Meets Some Expectations			Exceeds Expectations			
Research Quality / Was insight shown?	0	1	2	3	4	5	6	7	8	9	10
Concepts / Were iterations high quality?	0	1	2	3	4	5	6	7	8	9	10
Thorough investigation / Was rigor evident?	0	1	2	3	4	5	6	7	8	9	10
Refinement /Were design details resolved?	0	1	2	3	4	5	6	7	8	9	10
Final Design / Did design address the problem?	0	1	2	3	4	5	6	7	8	9	10
Innovative Problem Solving / Was solution unique?	0	1	2	3	4	5	6	7	8	9	10
Craftsmanship / Well executed models and drawings	0	1	2	3	4	5	6	7	8	9	10
Form / Successfully expresses function of product?	0	1	2	3	4	5	6	7	8	9	10
Manufacturing / Practical solution shown?	0	1	2	3	4	5	6	7	8	9	10
Presentation Quality / Clear and concise?	0	1	2	3	4	5	6	7	8	9	10

Grading Weights

Assignment	Weight	Duration
Project 1	45%	5 weeks
Project 2	45%	6.5 weeks
Participation	10%	

Scope of Work:

Project 1: 5 weeks

Research, propose and design product ideas for a **client based** project.

1. To learn how to design and develop products based on a clients very specific requirements
2. Use sketching skills and digital tools to generate multiple design solutions and refine them.
3. Make models to demonstrate product ideas and to simulate the product experience
4. To understand design tradeoffs between function/form/material/fabrication and manufacturing constraints.
5. To learn to design to meet reasonable manufacturing costs

Deliverables:

- Research documentation
- Sketches and Concepts
- Iterative prototypes
- Works like prototypes / Looks like sketches
- Presentation materials

Project 2: 6 weeks
Research, propose and design product ideas for a **social impact** project. This will be a group project.
Deliverables:

- Research and insight documentation
- Sketches to show concept development
- CAD models and renderings as needed to show function
- Iterative prototypes
- Storyboards to show workflow
- Final Presentation showing look and function, along with a package of information to be turned over to a fabrication team.

Required Course Materials

Course Text

There are **NO** assigned course text for this course. The following books however, are all recommended general reading for learning more about Industiral Design.

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 website resources:

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

Additional Materials/Resources

Student must have the following studio materials and supplies ready for use:

Presentation Supplies: 8.5” x 11” and 11” x 17” plain white paper, push pins, etc.

Sketching and Drawing Supplies: Fine line markers of various thicknesses, Sketch book, x-acto knife, tape, etc.

Model Making Supplies: Hot glue gun, clay, foam core board and other model making supplies

Computer Supplies: Laptop, appropriate software, flash drive, etc.

Prorotyping: This course requires students to make models and prototypes of their product ideas. The cost of making the models will vary depending on the size of the models, and on the type of fabrication required. Students can take advantage of many free and low cost fabrication services on campus, but it is not unusual for students to spend $200 on supplies and/or 3D printing costs per project. Every effort will be made to keep costs as low as possible.

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.

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 when requested. If you have any questions about your grades or assignments feel free to email or meet with your instructor for clarification.

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/

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.

Accommodations for Students with Disabilities

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. Depending on when you arrive to class, a late arrival can count from 1/4 to a full day absence.

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

Additional Criteria for Successful Completion of This Course

Extensions, Late Assignments, Presentations, & Re-Scheduled/Missed Exams. If any assignment is turned in from 1 hour to up to one week late, you can expect at least a 10-point reduction in the overall grade of that assignment. If your assignment is more than one week but less than 3 weeks late, 20 points will be deducted. No work will be accepted more than 3 weeks late. 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.

Collaboration & Group Work

This class may require some in class group work.

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.

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 :)

"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"

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.

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.

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.