ID 4863: Syllabus

Design for Body Fit - Room 150- Body Scan Lab

Tuesday / Thursday 12:30 - 1:45pm

3.0 Credit Hours

Instructor Information

Instructor	Email	Office Hours & Location
Professor Roger Ball MFA PhD	rball7@gatech.edu	Room 156 M-Th 12:00- 1:00 pm
TA YoungJin Choi	ychoi476@gatech.edu	
TA Amity Perry	aperry68@gatech.edu	

General Information

Description

Designing products to fit the human head are challenging due to the complexity of fit. Head worn products such as eyewear, VR headsets, surgical masks and helmets need to fit users seamlessly to function effectively however fit is a complex and multilayer challenge. This course explores the four factors that influence the successful design of head worn products: anthropometrics, comfort, vanity and social acceptance.

This product design course equips students with the skills to create design solutions that are ergonomically tailored to the human body. We use an iterative prototyping method to develop design solutions with each student typically producing 3-5 prototypes. Students develop design solutions for a range of body-worn products including soft goods, footwear, eyewear, body armor, personal protective equipment (PPE), and headgear.

Applying the technologies such of 3D scanning, 3D printing, and CAD software, students produce highly refined, innovative portfolio-ready designs. Key themes include product customization and brand development, preparing students for forward-thinking roles in the sports, wearable tech and healthcare industries.

Pre- &/or Co-Requisites

ID sophomore studio or equivalent

Course Goals and Learning Outcomes

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

- Identify the fit factors that affect body fit product design
- Apply the technologies of body scanning and prototyping to body fit products
- Create a series of iterative prototypes of your design solution
- Communicate key benefits of your design solution through a poster, a process book and a short pitch video

Course Requirements & Grading

Assignment	Percentage
Assignment 1 Major project	80%
Engagement & participation	20%

Extra Credit Opportunities

Please approach me individually of you are interested in extra credit opportunities.

Grading Scale

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

A	90-100%	(Guide: Independent work style and exceeding expectations)
B	80-89%	(Guide: Meet expectations)
C	70-79%	(Guide: Meets the majority of expectations)
D	60-69%	(Guide: Fails to meet some expectations)
F	0-59%	(Guide: Fails to meet most expectations)

Course Materials

Classroom Management Tools

The course uses four essential digital tools:

1. Zotero. We will use a shared group on Zotero for researching and sharing journals articles and documents.
2. Canvas. For distributing course materials, class announcements, weekly reviews, discussion posts and for submitting class assignments.
3. LinkedIn. For recruiting subject area experts, growing professional network, finding job leads and posting of design content.
4. Google Drive. Use for public presentations and communication. Upload all assignment to folder https://drive.google.com/drive/folders/1XzE4XBhG7qySqlrjjjuGg4dQ0jqqmHlV?usp=drive_link

Course Expectations & Guidelines

Academic Integrity

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 Individuals with Disabilities

If you are a student with learning needs that require special accommodation, contact the Office of Disability Services (often referred to as ADAPTS) at (404)89-2563 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.

Attendance

Students must attend class at designated times with all assigned work prepared for review. They are permitted three unexcused absences without documentation. According to GT policy, after five absences, students fail the course because they have not attended enough to justify the credit hours. Classes begin promptly at 9:05. Students are encouraged to arrive 10-15 minutes early to check the network, confirm assignments have been uploaded, and catch up with classmates. If you anticipate missing a class for a valid reason, such as a major religious observance or participation in an approved Institute activity, please inform your instructor in advance. In the event of an unexpected situation, it is your responsibility to contact your instructor within 24 hours of the scheduled class time.

http://www.catalog.gatech.edu/rules/4/

Late Assignments & Resubmissions

My aim is to ensure you have the best possible work for your portfolio, which is why I have a distinctive late policy for assignments. All assignments must be submitted by the due date for grading. However, I am always open to accepting resubmissions **without penalty** after the deadline. When submitting an assignment, ask yourself, "Is this my best work?" If there's any doubt, continue refining it and resubmit once it meets your quality standards. If your resubmission shows improvement, I will raise your grade.

Additional Course Policies

- All work must be original
- No internet images or stock photography accepted except for non-public classroom discussion purposes.
  When GT displays your work in public at LaunchPad or GTID website GT is liable for any copyright infringement.
  Take your own research photos and photo document your entire design process. If you don't own the copyright or have permission, you can't use the images.
  Every time you use someone else's images to explain your design work you miss an opportunity to impress with your own work.
- Keep email concise.
- No animals in class
- No eating during class.
- Coffee and water encouraged
- Please keep your desk and the studio clean.

Student Use of Mobile Devices in the Classroom

Students are expected to be considerate of others in their use of mobile phones and laptops within the classroom. Phones should be always silenced. If you have a call that you must answer step outside the classroom so as not to disturb others. Students should not text or check social media etc. during class time to avoid distracting others and to maximize learning.

Student-Faculty Expectations

At Georgia Tech we believe that it is important to continually strive for an atmosphere of mutual respect, acknowledgement, and responsibility between faculty members and the student body. Respect, hard work, and cordial interactions will help build the collaborative environment we seek.

Weekly Schedule

Wk.	Date	Activity
1	Tuesday Jan 13	Introductions of course outcomes and goals
1	Thursday Jan 15	Instructor Portfolio *Discussion post 1- Favorite body fit product*
2	Tuesday Jan 20	Landmarking/scanning workshop
2	Thursday Jan 22	Library training Zotero, Statista, Mintel
3	Tuesday Jan 27	Landmarking/scanning workshop
3	Thursday Jan 29	Concept presentation – 3 concepts
4	Tuesday Feb 3	Term Project individual review
4	Thursday	Term Project individual review

	Feb 5	
5	Tuesday Feb 10	Design Reframe presentation- Research question and statistics
5	Thursday Feb 12	Prototype development – individual review
6	Tuesday Feb 17	Hack prototype presentation
6	Thursday Feb 19	Term Project individual review
7	Tuesday Feb 24	Term Project individual review
7	Thursday Feb 26	Term Project individual review
8	Tuesday Mar 3	Prototype presentations
8	Thursday Mar 5	In class - prototype 2 development and review
9	Tuesday Mar 10	Branding workshop
9	Thursday Mar 12	Commercial techniques and examples *Discussion post 2 - great commercial*
10	Tuesday Mar 17	In class - prototype 2 development and review
10	Thursday Mar 19	In class – storyboard review
11	Tuesday Mar 24	**Spring Break- no classes**
11	Thursday Mar 26	**Spring Break- no classes**
12	Tuesday Mar 31	In class - prototype 2 CFM
12	Thursday April 2	In class - prototype 2 development and review
13	Tuesday April 7	In class – commercial due
13	Thursday April 9	In class – open studio
14	Tuesday April 14	**Final Presentation**
14	Thursday April 16	**Final Presentation**
15	Tuesday April 21	Project revisions *Discussion post 3 – Reflection on learning*

15	Thursday April 23	Project revisions
16	Tuesday April 28	Final Class - Reflection
17	Tuesday May 3	LaunchPad Set up at 1:30pm. Bring Posters and display stands

Class Discussion Topics

1. What is your design process when you work on a body fit product?
2. How does designing a body fit project differ from say designing a speaker or appliance?
3. What would be your first steps for this project?
4. What do you imagine the biggest challenge is in body fit design?