

Vertically Integrated Project (VIP) - HumaniTech

[Lecture: W 2:00-2:50pm, Kendeda Building Innovation Studio 110]

[Lab Location: Love Manufacturing Building 224]

[Office Hours (TBD): Tentative: M 2:00-3:00pm, Kendeda Building Innovation Studio 110]

Instructor	Email
Andrew Schulz (he/him/his)	akschulz@gatech.edu
Robert Wallace	Robert.Wallace@gtri.gatech.edu

Inside this Syllabus

Course Description:

1. Course Details	To improve health outcomes, nutrition, and general living conditions in developing nations and resource-limited environments through a variety of key technologies. These solutions include sensors for sanitation in challenging environments, improving access to healthcare through the development of low-cost technologies focusing primarily on child and maternal health, data analytics, and human centered design.
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Course Details

Course Goals: Upon successful completion of this VIP, you will be able to:

1. Identify ways STEM majors can impact the public health industry
 - a. Describe challenges in public health and work towards management and elimination solutions
2. Design and implement ethical solutions to both domestic and international crises.
 - a. Identify different ethical research organizations in areas you are interested in
3. Effective recording of detailed Scientific methodology and project outcomes in a notebook
4. Review and Critique related literature and media to your project scope
5. Communicate with international leaders in human centered design focused in challenging environments

Course Projects

To improve health outcomes, nutrition, and general living conditions in developing nations and resource-limited environments through a variety of key technologies. These solutions include sensors for sanitation in challenging environments, improving access to healthcare through the development of low-cost technologies focusing primarily on child and maternal health, data analytics, and human centered design.

This VIP has several ongoing and new projects with project sponsors from around the world. Each VIP member will join one of the several project teams comprising of 2 to 8 students each. For more information on each project description please view the Current, New, and Ongoing HumaniTech Project Slides.

Course Expectations & Guidelines

While working on your projects in and outside of class it is expected you are attentive and that you will ask questions to guest speakers and/or your peers. For those students presenting or leading discussing in class it is expected that you listen to your peers and respect their wishes. To succeed in this course, I expect you to have developed an understanding of the species you are studying and the challenges that species is currently facing.

As a nature of the VIP there are several different majors working on the same project and it is encouraged for you to get outside of your major area and explore other ideas and possibilities on your research and in your journal presentation.

I expect you to be honest and fair to all your peers during the peer review process. The Graduate Assistant will be reviewing the peer evaluations and will be following up with students that are not meeting the course expectations.

Attendance and/or Participation

Attendance and participation are required to succeed in the course. Attending and participating in your peers' journal presentations, guest speakers, etc. is required of those that do not have class conflicts. If you do have class conflicts these are not required. There will be midterm and final presentation days and it is expected that all members of the class will be in attendance for the presentations.

This course utilizes a Microsoft Teams channel for communication between the class as well as project teams and other opportunities. The link to join the Teams pages is provided [here](#).

If you will miss class for any reason, please let the graduate assistant know akschulz@gatech.edu. It is understood that college is stressful and that their things that happen in life so if you are not able to let the graduate assistant know beforehand please let them know in a timely manner. All students in the course will be given one mental health day where no notification of missing class is necessary. The Graduate Assistant will do their best for all courses to recorded via Bluejeans on Canvas and posted at the end of class for those that must miss class for any reasons.

Collaboration & Group Work

There are many different items in this classroom that are group oriented. I encourage and insist you work closely with your groups for your presentations and reports. It is also important to that each student should have an individual notebook and should not copy/cheat off their peers' notebooks. Each person's notebook will be unique to them. It is expected for group members to miss occasional out of class/in class meetings.

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

Most of the assignments in this class are based on participation. If you forget to bring your notebook to class, then discuss with the Graduate Assistant to find a time to bring the notebook. If you miss the midterm or final presentation for an excusable reason, then a time will be set up for you to sit down share and present the information you worked on with the Graduate Assistant and/or Faculty mentor.

Student Use of Mobile Devices in the Classroom

Cells phones can and should be used in the classroom for helping with research, messaging contacts, skyping missing group members, etc. During all presentations it is expected for you to be attentive to the presenters

Instructor & Teaching Assistant Evaluations

In the weeks leading up to the midterm and final presentations anonymous surveys will be given to the VIP members to gauge in what additional tools the instructors can provide to help with your projects. These surveys will serve as a tool for improving this course and give feedback to the instructors on their involvement in the course.

Course Requirements & Grading

A list of the different components of this VIP course are listed below. If you have further questions about the course requirements/grading

Assignment	Percent of Total Grade
Documentary Reflection Assignment	5%
Human Centered Design Case Study	10%
Midterm Presentation	15%
Final Presentation	20%
Notebook	20%
Final Report	20%
Peer Evaluations	10%
Extra Presentation for 2-credit hours	Required to pass class*

*The Extra Presentation is only required if you are enrolled in 2-credit hours and there are several ways over course of the semester to meet this requirement

Description of Graded Components

Rubrics for each of the following will be posted to the canvas page. You will also receive comments from the TA for each submitted assignment.

Case Study: This assignment is to help you get to understand other challenges outside of your project group. This assignment is for you to look at the [UN 17 Sustainable Global Development Goals](#) and to work on an infographic, an essay, or a This assignment will be given at the beginning of the course to be completed in the first few weeks of class. At least two citations are required in a consistent format. This will be graded on grammar, relevance to your group project, and must include discussion on how humans, specifically you, can help.

Presentations: Several weeks throughout the semester each team will be expected to give a 10-minute presentation on their progress for their project. Each team member is expected to contribute in terms of the work as well as the presentation slides. At the end of each presentation, questions will be asked by both the instructors and other peers.

Notebooks: The notebooks can be done either in an electronic format (word, latex, etc.) or handwritten. The notebook should follow the VIP guidelines listed here: <https://www.vip.gatech.edu/vip-notebooks>. If you would like to see an example e-notebook, there is one in the files section on canvas. You will turn in the notebook mid-semester and the TA will give comments for you to improve on as well as a temporary grade. This grade can be improved by making the listed changes before the end of the semester. In class participation is graded in the notebooks as you should be documenting what occurs during class in your notebooks so although there is no exact participation grade it will be assessed through the notebook.

Final Report: The final report will serve as a helpful document for the team continuing the project next semester. This report should essentially be your final presentation slides with descriptions in a word documented form that is well documented. This will assist the subsequent teams in understanding what the project is and how to continue the project. There are examples of final reports in the files portion of Canvas.

Grading Scale

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

A – Excellent 90-100%

- B - Good 80-89%
- C - Satisfactory 70-79%
- D - Passing 60-69%
- F - Failure 0-59%

At Georgia Tech, grades are awarded on a scaled of A-F with no +/- grades permitted. Many of the grades in this course are based off your participation classroom team meetings, journal clubs and participating in the group meetings outside of class.

Additional Course Material

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

Statement of Inclusivity:

As a member of the Georgia Tech community, I am committed to creating a learning environment in which all my students feel safe and included. Because we are individuals with varying needs, I am reliant on your feedback to achieve this goal. To that end, I invite you to enter into dialogue with me about the things I can stop, start, and continue doing to make my classroom an environment in which every student feels valued and can engage actively in our learning community. It is important that this classroom and office hours/meetings are a Safe Space for all communities.

Statement on Student Wellness:

Take care of yourself. Do your best to maintain a healthy lifestyle this semester by eating well, exercising, getting enough sleep, and taking some time to relax. This will help you achieve your goals and cope with stress. I (Andrew Schulz) try and maintain my wellness by cooking with friends, going to Hapkido classes at the CRC, and meeting with my therapist.

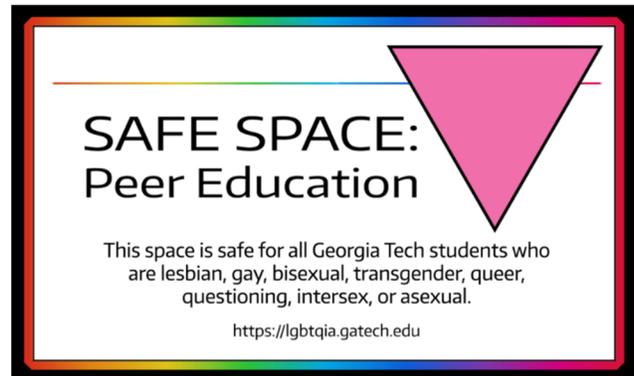
All of us benefit from support during times of struggle. There are many helpful resources available on campus and an important part of the college experience is learning how to ask for help. Asking for support sooner rather than later is almost always helpful.

If you or anyone you know is experiencing academic stress, difficult life events, or is feeling anxiety or depression. I will personally talk with you and walk you to the university resources that can help.

If you have questions about this or your coursework, please let me know. Thank you and have a great semester.

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 to set up a time to discuss your learning needs.



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

Course Schedule

Below is a list of the preliminary course schedule for everyone. If you have any questions let me know.

Week:	Date:	Topic:	Deliverables:
1	August 25	HumaniTech 101 & Intro to VIP – Andrew Schulz	
2	Sep 1	Project Deliverable Goals, Team Q&A (Speed Dating) – Andrew Schulz	Returning Teams Make Project Slide
3	Sep 8	Project Exploration– Robert/Andrew	Teams Decided & Meet Once
4	Sep 15	Project Narrowing – Semester Deliverables Decided	HCD Case Study Due
5	Sep 22	One Slide, 3-minute presentations by each group on their project & deliverables	
6	Sep 29	Guest Speaker 1 - TBD	One Slide Presentation
7	Oct 6	Midterm Presentations Due before Class	Mid Semester Peer Evals
8	Oct 13	Guest Speaker 2- TBD	Mid Semester Notebook Check
9	Oct 20	Guest Speaker 3	
11	Oct 27	Team Meeting	
12	Nov 3	Guest Speaker 4	
13	Nov 10	Guest Speaker 5	
14	Nov 17	Team Meetings/Prep for Final Presentations/End of Semester Recap	Final Peer Evaluations Due, CIOS/TAOS Survey
15	Nov 24th	Thanksgiving Break!!	
16	Dec 1	Final Presentations	Final Presentation Due, Extra Presentation Due*
17	Dec 8	Finals Week	Project Deliverables, Notebook, & Report Due