VIP Syllabus • Spring 2027
WELab — Vertically Integrated Projects (VIP)

*Note: VIP 2601, 3601, 3602, 4601, 4602, 4603, 6600, 6601, & 6603 are cross-listed.

Instructor Information

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General Course Information

Description

The Workplace Ecology Lab (WELab) VIP focuses on sustainable, human-centered environments in workplaces, homes, and climate-impacted communities. Using mixed methods like sensors, wearables, and observation design, students research cognitive aging, thermal comfort, indoor environmental quality, and climate migration to enhance well-being amid environmental challenges.

About VIP

The Vertically Integrated Projects (VIP) Program operates in a research and development context. Undergraduate students that join VIP teams earn academic credit for their participation in design/discovery efforts that assist faculty and graduate students with research and development issues in their areas of expertise.

VIP teams are:

- *Multidisciplinary* — drawing students from all disciplines on campus.
- *Vertically integrated* — maintaining a mix of sophomores through PhD students each semester.
- *Long-term* — undergraduates may participate for up to three years; graduate students may participate for the duration of their graduate career.

The continuity, technical depth, and disciplinary breadth of these teams are intended to:

- Provide the time and context necessary for students to learn and practice many different professional skills, make substantial contributions to the project, and experience different roles on a large, multidisciplinary VIP team.
- Support long-term interaction between graduate and undergraduate students on the team, with graduate students mentoring undergraduates on VIP projects embedded in graduate research.
- Enable the completion of large-scale projects that are of significant benefit to faculty members' research programs.

Pre- &/or Co-Requisites

There are no pre-requisites or co-requisites for this course.

Course Goals and Learning Outcomes

Through VIP, students will:

1. Learn and practice professional skills.
2. Make substantial contributions to the team project.
3. Experience different roles on a large, multidisciplinary team.
4. Document and communicate work effectively through a VIP notebook and team deliverables.

5. Collaborate across disciplines and experience levels in a long-term, research-driven environment.

Team Focus

Research Focus 1 - Global Perspectives in Climate Migration: Resilience, Relocation & Sustainable Futures examines how climate change drives both movement and immobility across diverse regions of the world. The course explores acute and chronic climate threats, the socio-economic, cultural, and political forces shaping migration decisions, and the design and policy tools that can enable sustainable futures. Through global case studies, students will analyze strategies for relocation, in-place adaptation, and hybrid approaches, with attention to justice, equity, and community agency. While a key focus is on resilience for those who remain in high-risk areas, the course equally addresses the planning, design, and governance challenges of supporting those who move—voluntarily or by necessity.

Research Focus 2 - Therapeutic Environments for Nursing Home Residents investigates how horticultural therapy and environmental design can improve older adults' cognitive function and emotional well-being in long-term care. In collaboration with a local nursing home provider, the team will examine outcomes and environmental moderators using mixed methods (e.g., longitudinal health data, observations and interviews, and environmental assessments) and explore pilot neurophysiological measures during therapy sessions (e.g., EEG/fNIRS and related biometrics) to inform evidence-based design principles for therapeutic indoor and outdoor activity spaces.

Research Focus 3 - Facility Management for Places of Worship develops a low-cost, low-tech facility management solution for places of worship. The project focuses on practical workflows for tracking assets, logging issues, and coordinating maintenance using tools that are accessible to staff and volunteers (e.g., lightweight digital forms, simple dashboards, and/or paper-to-digital processes). The goal is to reduce operational friction while improving visibility, accountability, and upkeep of facilities.

Course Requirements & Grading

The premise of VIP is teams working on projects. Much like a real-world team, individual members work on different aspects of the project. Team members range from sophomores through graduate students, from first-time participants to students who have been involved for multiple semesters. The number of credits for which a student is enrolled is considered in grading. Zero-credit students (reserved for paid participation only) participate in the same grading process.

Grading Overview

Your grade is based on four areas, along with three requirements. Although each student contributes in different ways, you must demonstrate achievements in all areas below.

1. **Documentation and records (25%)**
   - VIP Notebook (required).
   - Code (via GT GitHub) if your sub-team develops software.
   - Engagement with assigned readings.
   - Weekly quizzes (Research Focus 1 only): quizzes must be completed by Sunday at 11:59 PM Eastern after posting in Canvas.
2. **Personal accomplishments and contributions to your team's goals (12.5%)**
   - Engagement in your project tasks.
   - Pursuit of knowledge necessary for your project.
   - Contributions to technical progress of the team
   - For more experienced members of the team, contributions to the management of the project may be expected.
3. **Teamwork and interaction (12.5%)**
   - Peer evaluations.
   - On-time attendance in team and sub-team meetings
   - Actively contributes to overall team goals.

- Coordinate activities with other team members
- Assist other team members.

4. **Deliverables (50%)**
   - Mid-term verbal presentation (15%)
   - Final written report and verbal presentation (35%)

Required items (all students):

- Maintain a VIP notebook. Scans of well-maintained VIP notebooks are available on the VIP website. **Each student must understand that if work is not documented in their VIP notebook, "Then you didn't do it,"** (i.e. work that is not documented in the notebook will not count toward your grade).
- Complete the mid-term peer evaluation. This is a web-based form, and links are available on the VIP website. **Failure to complete the peer evaluation will result in a full letter grade deduction. Late submissions are not accepted.**
- Complete the final peer evaluation, which will be available for one week during the week preceding finals. **Failure to complete the peer evaluation will result in a full letter grade deduction. Late submissions are not accepted.**

Performance assessments are conducted at midterm and at the completion of the semester. The mid-term assessment is advisory.

Notes on Documentation

VIP documentation is required. Maintain records that allow others (including future team members) to understand what you did, why you did it, and what you learned.

Category	Expectations
Notebook Maintenance	- The notebook must be a bound notebook, with a sewn or glued binding, such as a composition book or lab notebook. - Your name, your project's name, your contact info, and your team members' contact info must be recorded on the outer or inside cover. - Each page must be numbered, dated, and signed. - ***We will use an electronic notebook (i.e., MS Word doc uploaded to the WELab VIP MS Teams Channel).**
To-Do List Maintenance	- Maintain check-boxes for items to be done. - Check-off and date items when done.
Meeting Notes	- For meeting notes, include check-boxes for items for which you are responsible and deadlines for your sub team and the overall team.
Usability	- Will your VIP notebook be of use to people who join the team later and need to refer to it? This includes legibility, intelligible technical and meeting notes, and overall organization.
Overall	- An overall rating of your notebook. (Detailed design notes, design decisions, copies of or pointers to code that you wrote, records of important websites, etc.)
GT GitHub (if student is developing software)	- GitHub code refers to code produced and checked into the GT GitHub or other VIP-approved code repository. The frequency, quantity and quality of contributions are evaluated.

Grading Scale

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

A	90-100%
B	80-89%
C	70-79%

D 60-69%
F 0-59%

Course Materials

Materials/Resources

Required: access to the WELab VIP Microsoft Teams channel, a method for maintaining your VIP notebook (electronic notebook is acceptable), and any software/tools required by your sub-team (e.g., data analysis tools, prototyping platforms). Sub-teams may request additional materials for prototyping; any required hardware access will be coordinated through the team.

Course Website and Other Classroom Management Tools

This course uses Canvas for official course communications and submission of any quizzes or readings (as applicable). The WELab VIP Microsoft Teams channel is used for day-to-day coordination, sub-team collaboration, and electronic VIP notebooks. If your sub-team develops software, GT GitHub (or another VIP-approved repository) will be used for version control.

Peer evaluations are administered by the VIP Program Click Here to access peer-evaluations from off campus. Click here to access from on campus. You will be prompted to sign in. Users can only log in from on campus or via VPN. Students can only access the peer evaluation portion of the system during active evaluation periods.

Course Policies, Expectations, & Guidelines

VIP is a collaborative, multidisciplinary, project-based learning and research experience. Your success in this course depends not only on your technical contributions but also on your active engagement with your team and the broader learning process.

Your Role in the Learning Process

As a VIP student, you are expected to:

- Take initiative in exploring and applying knowledge relevant to your project.
- Collaborate effectively with team members across disciplines and experience levels.
- Document your work thoroughly.
- Reflect on your learning and contributions throughout the semester.

This course is a real-world team environment, where learning is dynamic, self-directed, and collaborative. Your growth depends on your willingness to engage, contribute, and learn from others.

Team Meetings and Participation

Each team will determine working times, designated as “sub-team meetings.” Students are responsible for participating in their team and sub-team meetings. If you miss any meeting, you are responsible for knowing what occurred in that meeting, typically by discussing it with other team members. An excused absence does not relieve you of that responsibility.

- Coordinating project tasks and timelines.
- Sharing progress and receiving feedback.
- Learning from peers and mentors.
- Contributing to team decisions and direction.

Failure to attend meetings without valid reason may negatively impact your grade and your team’s progress. If you anticipate missing a meeting, communicate with your team and advisor in advance.

Use of External Resources

You are encouraged to consult external sources to support your learning and project work. However:

- Do **not present someone else's work as your own**.
- Always **cite and reference** external materials used in your notebook, code, presentations, or other deliverables.
- Proper attribution is essential to maintain transparency and integrity in a collaborative research environment.

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. Review Georgia Tech's Honor Code and the student Code of Conduct.

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 (404-894-2563) 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 and/or Participation

Attendance and active participation in weekly team meetings and scheduled sub-team meetings are expected. If you anticipate missing a meeting, notify your sub-team lead and the instructor in advance. Repeated unexcused absences may negatively impact your grade and your team's progress.

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

Because VIP work is collaborative, deadlines for deliverables (e.g., presentations, reports, documentation submissions) must be met to avoid impacting the team. Requests for extensions should be made in advance and will be considered on a case-by-case basis.

Inclement Weather and Digital Learning Days

In the event of inclement weather or an Institute-authorized disruption, course activities will follow Georgia Tech guidance. When appropriate, meetings and deliverables may shift to remote participation using Canvas and/or Microsoft Teams.

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. The Student-Faculty Expectations articulate some basic expectations 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.

Student Use of Mobile Devices in the Classroom

Mobile devices and laptops are permitted when used to support VIP work (e.g., note-taking, collaboration, data collection, documentation). Please avoid use that distracts from team discussions and project activities.

Additional Course Policies

VIP Room and Equipment Use Policy

VIP rooms and equipment are shared resources used by multiple teams. To ensure a productive and respectful working environment, the following rules apply:

1. Room Usage Priorities

Room use is prioritized as follows:

1. Scheduled team meetings, lectures, and learning modules
2. Weekly sub-team meetings (multiple groups may share the space)
3. Video conferences or special meetings with VIP stakeholders
4. Other project-related work (multiple groups may share the space)

Room schedules are available on the VIP website.
Note: A "good neighbor" policy applies—students may use rooms during other activities as long as they do not cause disruption. Quiet individual work or studying is allowed when it does not interfere with scheduled uses. Similarly, multiple groups may use a VIP room at the same time.

2. Cleanliness and Conduct

- Everyone is responsible for keeping rooms clean.
- Food is allowed, but spills must be cleaned immediately.
- Gum must be disposed of properly—do not stick it under desks or on carpets.
- Rooms are monitored by cameras; violations may be reviewed via video.

3. Equipment Use

- Equipment may be designated for general use or assigned to specific teams.
    - General use examples: Projector in Klaus 1440, monitors in VL 465 and VL 463B.
    - Equipment assignments may change each semester.
- If unsure about equipment access, contact: vip@gatech.edu
- Use equipment only for its intended purpose. Misuse may pose safety risks.
- Important Equipment Rules:
- Equipment may not be removed from VIP rooms without a signed loan agreement approved by a VIP Director.
- You are financially responsible for any equipment not returned in good condition.
- You must know how to operate equipment safely. Approval to use equipment does not imply safety training has been provided.

4. Computer Accounts

- Accounts are for individual use only—do not share with others.
- All usage must comply with Georgia Tech, USG Board of Regents, and State of Georgia policies.
- Respect privacy and data integrity. Having access to a file does not mean you are authorized to read or modify it.

5. BuzzCard Access

- Access is a privilege and is logged.
- Rooms are under video surveillance. In cases of theft, vandalism, or messes, logs and footage will be reviewed.
- Do not allow unauthorized individuals into VIP spaces.
- Always secure the room (close the door) when leaving.

Campus Resources for Students

Undergraduate Student Academic Success Resources:

A list of resources for undergraduate students' academic success and information about advising can be found at Success at Tech.

- 1:1 Tutoring: Students looking for additional assistance outside of the classroom are advised to consider working with a peer tutor through Knack. Georgia Institute of Technology has partnered with Knack to provide students with access to verified peer tutors who have previously aced this course. To view available tutors, visit gatech.joinknack.com and sign in with your student account.

Graduate Student Academic and Professional Success Resources:

A list of resources for graduate students is given on the Office of Graduate and Postdoctoral Education website. Specific information for current graduate students includes

- Academic Resources such as the Communications Center, Language Institute, Library, Catalog, Registrar, resources for conducting research, Advocacy and Conflict Resolution resources, and how to manage unexpected situations that may impact your academic performance;
- Student Resources such as Campus Services, Child Care/Family programs, Health & Wellness, Career Services, and the Student Resource Guide; and
- Professional Development such as the programming from the Career Center and other professional development resources and events"]

Student Well-Being:

At Georgia Tech, we are concerned about your overall physical, social, and mental well-being. A comprehensive list of wellness related resources has been compiled and maintained by the Office of the Vice President for Student Engagement and Well-being (student-resource-guide (gatech.edu).