

**Multidisciplinary Project: VIP Program**  
**{Project Name}**

College of Engineering & Applied Sciences  
Stony Brook University

**Syllabus**

**Instructor(s):** *Name(s) of Faculty Project Advisor(s)*

**Team Meetings:** *Time & Location (entire team meets 1 hr per week, subtask meeting times scheduled after first organizational meeting)*

**Course Description:** Students participate in a multi-term, multidisciplinary project, working with team members ranging from first-year students through seniors and graduate students. Projects are advised by one or more faculty on topics of research, design, innovation and entrepreneurship. While a project is framed within a faculty member's area of expertise, contributions are needed from a diverse array of disciplines. VIP 295 is intended for introductory team members, VIP 395/396 is intended for intermediate team members or students who have working knowledge of the project topic, and VIP 495/496 is intended for advanced team members with two or more semesters of experience on the same project. VIP 595/596 is intended for master's students who can take a leadership role in a project subtask. VIP 695 is intended for doctoral students whose dissertation research is directly related to a project led by his or her faculty advisor. Students are expected to maintain involvement with the same project team for multiple terms. Refer to individual course descriptions for prerequisites and credit limitations.

**About VIP:** The Vertically-Integrated Projects (VIP) Program builds teams of students and faculty who work together on issues of real significance for our technology-driven society. Project topics are defined by faculty in their areas of expertise. They contribute to research programs, educational innovations, industry partnerships, or student design and entrepreneurship activities. Students that join VIP teams earn academic credit for their participation and documented contributions to the team effort. See <https://www.stonybrook.edu/vipp> for more information.

The teams are:

- Multidisciplinary - drawing students from all disciplines on campus;
- Vertically-integrated - maintaining a mix of sophomores through PhD students each semester;
- Long-term - each undergraduate student may participate in a project for up to three years and each graduate student 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 many different roles on a large, multidisciplinary team.
- Support long-term interaction between the graduate and undergraduate students on the team. Graduate students mentor the undergraduates as they work on projects embedded in the graduate students' research or field of employment.
- Enable the completion of large-scale projects that are of significant benefit to faculty members' research programs, educational innovations, industry partnerships, or design teams.

## Learning Objectives:

### VIP 295 & 395/396:

1. Learn to function as a contributing member of a multidisciplinary team.
2. Build self-efficacy and motivation for academic success by applying knowledge obtained in earlier coursework to an open-ended project.
3. Learn the value of reflection and self-assessment in reaching personal and team goals.
4. Obtain skills necessary for independent research and life-long learning.
5. Learn to document and communicate contributions toward a team effort.

### VIP 495/496 & 595/596:

1. Build skills for mentoring new team members to become productive contributors.
2. Understand and accept the role of a senior team member to promote an inclusive work environment for members with diverse backgrounds, expertise, and experiences.
3. Establish an ability to manage the efforts, prioritize goals and set deadlines for a group task.
4. Learn to lead and accept accountability for the progress of a group task.
5. Learn to organize, document, and communicate the progress of a team effort.

### VIP 695:

1. Build skills for research project management and mentoring.
2. Understand and accept the role of a project manager to promote an inclusive work environment for members with diverse backgrounds, expertise, and experiences.
3. Build skills for documenting and reporting the progress of a large team effort.

## Schedule:

Week 1 – Introductions, Overview of Project, Discussion of long-term and semester goals

Week 2 – Sub-team selections made. Sub-team meeting times sets. (Students must bring their VIP notebook to this and all future meeting).

Week 3 – Sub-team meetings begin. Assignment: First-semester VIP participant are to self-grade their VIP notebook according to the attached rubric, with a focus towards understanding course expectations and practicing reflection and self-assessment. Reflections and goals based on this assignment are to be recorded in the VIP notebook.

Week 4 – Self-graded rubric due at team meeting.

Week 7 – Mid-term peer-evaluations conducted (at

[https://www.stonybrook.edu/vipp/current\\_vip\\_students/student\\_login](https://www.stonybrook.edu/vipp/current_vip_students/student_login)).

Week 7 or 8 – VIP notebook submitted at team meeting for mid-term grading.

Week 14 – End-of-term peer-evaluations conducted (at

[https://www.stonybrook.edu/vipp/current\\_vip\\_students/student\\_login](https://www.stonybrook.edu/vipp/current_vip_students/student_login)).

Week 15 – Final presentations, VIP notebook submitted for final grading.

**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 four or more semesters. The number of credits for which a student is enrolled is factored into grading.

The term grade is based on three area. Although each student contributes in different ways, achievement must be demonstrated in all three areas:

1. **Documentation and records (33%)**
  - VIP Notebook
  - VIP Wiki/blog/website documentation
  - Code repository (if applicable)
2. **Personal accomplishments and contributions to the team's goals (33%)**
  - Contributions to the team, such as technical progress, pursuit and sharing of knowledge, and task planning and execution. Expectations for advanced members include leadership, mentorship, and delegation of tasks.
  - Presentations/reports as required by instructor
  - Quizzes and learning modules as required by instructor
3. **Teamwork and interaction (33%)**
  - Peer Evaluations
  - Meeting attendance and involvement
  - Communication and inclusiveness,
  - Contributes useful ideas and recognizes other's ideas
  - Team reports and presentations.
  - Involves and assists others in effort
  - Leadership/Cooperation

As part of the assessment of the above, each student is required to:

- a. Maintain a VIP notebook. **Each student must understand that if work is not documented in his/her VIP notebook, "Then you didn't do it,"** (i.e. work that is not documented in the notebook will not count toward your grade).
- b. Complete the mid-term peer evaluation. **Failure to complete the peer evaluation will result in a full letter grade deduction. Late submissions are not accepted.**
- c. Complete the final peer evaluation. **Failure to complete the peer evaluation will result in a full letter grade deduction. Late submissions are not accepted.**
- d. Be proactive and self-motivated. The nature of individual tasks on any team requires members to be proactive and self-motivated for the project to succeed.

**VIP Notebook Requirements:** (see attached VIP Notebook Grading Rubric)

- General Maintenance:
- The notebook must be bound, 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.
  - All entries should be in chronological without skipping pages.
  - Errors should be crossed out with an X or a single line, such that the original entry remains legible

- To-Do List Maintenance:
- Maintain check-boxes for items to be done.
  - Check-off and date items when done.

- Meeting Notes:
- Include detailed meeting notes, check-boxes for items for which you are responsible and deadlines for your sub team and the overall team.

- Technical/Research Notes:
- Detailed design notes and decisions, diagrams, data collected, research notes, thoughts and ideas (random to refined), references,

etc. Note: Electronically generated content can be printed and taped into your notebook.

Reflections:

- Reflections on directions, progress, and outcomes of decisions.

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.

**Academic Honesty:** The main principle in VIP academic honesty is that you will not present someone else's work as your own. Tests and specific assignments (homework, lab assignments, etc.) must be your own work. For other work you are encouraged to consult whatever sources are helpful in learning and understanding the issues associated with the material, but you should always provide appropriate references and citations where such material is included in your VIP notebook, programming code, presentations, etc. To provide a good working environment for all students, you're expected to adhere to rules given here, posted, or disseminated in class. Academic Honesty is taken seriously and failure to follow these principles will result in disciplinary actions as stated in the statement below.

**Academic Integrity Statement:** Each student must pursue his or her academic goals honestly and be personally accountable for all submitted work. Representing another person's work as your own is always wrong. Faculty is required to report any suspected instances of academic dishonesty to the Academic Judiciary. Faculty in the Health Sciences Center (School of Health Technology & Management, Nursing, Social Welfare, Dental Medicine) and School of Medicine are required to follow their school-specific procedures. For more comprehensive information on academic integrity, including categories of academic dishonesty please refer to the academic judiciary website at [http://www.stonybrook.edu/commcms/academic\\_integrity/index.html](http://www.stonybrook.edu/commcms/academic_integrity/index.html)

**Student Accessibility Support Center Statement:** If you have a physical, psychological, medical or learning disability that may impact your course work, please contact Student Accessibility Support Center, ECC (Educational Communications Center) Building, Room 128, (631)632-6748. They will determine with you what accommodations, if any, are necessary and appropriate. All information and documentation is confidential.

**Critical Incident Management:** Stony Brook University expects students to respect the rights, privileges, and property of other people. Faculty are required to report to the Office of University Community Standards any disruptive behavior that interrupts their ability to teach, compromises the safety of the learning environment, or inhibits students' ability to learn. Faculty in the HSC Schools and the School of Medicine are required to follow their school-specific procedures. Further information about most academic matters can be found in the Undergraduate Bulletin, the Undergraduate Class Schedule, and the Faculty-Employee Handbook.

### VIP Notebook Grading Rubric

Student Name	VIP Team	Semester

Category	Detail	Does not meet expectations	Meets expectations	Exceeds expectations
General Maintenance	Proper format	① ②	③ ④	⑤ ⑥
General Maintenance	Regularly Updated	① ② ③ ④	⑤ ⑥ ⑦ ⑧	⑨ ⑩ ⑪ ⑫
To-do lists	Utilization and Regular Maintenance	① ②	③ ④	⑤ ⑥
Meeting Notes	Detail and Organization	① ② ③ ④ ⑤ ⑥	⑦ ⑧ ⑨ ⑩ ⑪ ⑫	⑬ ⑭ ⑮ ⑯ ⑰ ⑱
Technical/ Research Notes	Completed tasks documented in detail	① ② ③ ④ ⑤ ⑥	⑦ ⑧ ⑨ ⑩ ⑪ ⑫	⑬ ⑭ ⑮ ⑯ ⑰ ⑱
Technical/ Research Notes	References and resources fully cited	① ②	③ ④	⑤ ⑥
Technical/ Research Notes	Team efforts credited and clearly distinguished from individual contributions.	① ② ③ ④	⑤ ⑥ ⑦ ⑧	⑨ ⑩ ⑪ ⑫
Reflections	Periodic reflections on directions, progress, and outcomes of decisions	① ② ③ ④	⑤ ⑥ ⑦ ⑧	⑨ ⑩ ⑪ ⑫
Usability	Neatness	① ②	③ ④	⑤ ⑥
Usability	Organized, Easy to follow	① ②	③ ④	⑤ ⑥
Usability	Usefulness as a team resource	① ② ③ ④ ⑤ ⑥	⑦ ⑧ ⑨ ⑩ ⑪ ⑫	⑬ ⑭ ⑮ ⑯ ⑰ ⑱
Total out of 100:				

Comments: