



WPI

2018 Institute on Project-Based Learning

***PBL Assessment & Feedback
(Handout 1)***

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Nantucket Project Center B17 Onsite Guidelines and Procedures

Faculty Advisors

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We hope you are excited about starting your IQP! We have prepared this document to help you understand the philosophy and intended learning outcomes of these projects; guidelines for meetings and presentations; the teamwork process; criteria for how your projects will be evaluated; and advice on having a good experience—professionally and personally. Separately, you'll be receiving a document with writing tips for each chapter of the report and a calendar of events and deadlines intended to keep your project on schedule. *Please read this document carefully before you arrive on island. We will expect you to be familiar with its contents and to use these guidelines during the term. Thanks.*

What Is an IQP?

The WPI Faculty created the IQP in order to educate scientists and technologists who understand the social and humanistic implications of their work. According to the learning outcomes stated for IQPs, students will:

1. Demonstrate an understanding of the project's technical, social, and humanistic context.
2. Define clear, achievable goals and objectives for the project.
3. Critically identify, utilize, and properly cite information sources, and integrate information from multiple sources to identify appropriate approaches to addressing the project goals.
4. Select and implement a sound approach to solving an interdisciplinary problem.
5. Analyze and synthesize results from social, ethical, humanistic, technical or other perspectives, as appropriate.
6. Maintain effective working relationships within the project team and with the project advisor(s), recognizing and resolving problems that may arise.
7. Demonstrate the ability to write clearly, critically, and persuasively.
8. Demonstrate strong oral communication skills, using appropriate, effective visual aids.
9. Demonstrate an awareness of the ethical dimensions of their project work.

The IQP is an opportunity for significant intellectual and professional development that, done well, provides WPI graduates with a broad set of skills in research, problem solving, teamwork, communication, project management, and leadership.

Basic Performance Expectations

You are going to Nantucket to do your IQP; it will be a full-time activity for you. We expect each student to put in at least 40 hours per week toward the project. This is about the amount that most full-time professionals work. On weekdays, you are expected to work a full day on your project, during *standard business hours*. This may take place at your sponsoring agency and it will also involve gathering data in the field. There may be times when deadlines or availability of resources require you to work late or on weekends, especially when doing field work; this is part of being a professional. As you will see from the calendar, you have a lot to accomplish, and a full slate of deadlines and activities. You should, however, have most weekends (except the last one or two) free to explore.

You will not be punching a clock, but rather will be expected to maintain an aggressive pace, and do what is necessary to make your project a success. We encourage you to enjoy your time in Nantucket, but that enjoyment must not preclude at least five full days of productive work per week.

Code of Conduct

While you are in Nantucket, you will be representatives of WPI 24 hours per day, 7 days per week. It is expected that your behavior towards your project partners, other WPI student and faculty, and the people you meet will be above reproach. We depend upon you to enhance and safeguard WPI's reputation with the sponsoring agencies, housing staff and residents, and others with whom you come in contact. We also depend upon you to act in a way that does not in any way threaten your safety and well-being, or those of anyone else. Remember that your actions and conduct will reflect upon you, your peers, and WPI. Think carefully about how you will be perceived by the people among whom you live, work, and socialize. Consider carefully the implications of any jokes, sexual references, or other behavior that may be inappropriate or upsetting to anyone around you.

When you are working on your project, you are expected to dress in a manner consistent with how *other professionals* (such as your liaison) tend to dress at your sponsoring organization. Keep in mind that certain occasions (presentations, meetings, interviews, etc.) might warrant more formal dress; less formal attire may be appropriate for other activities. If you have any questions about this, ask us or your sponsor. When in doubt, dress up, not down.

Even though you are in Nantucket you are expected to adhere to the WPI Code of Conduct and Academic Honesty Policy, and should be aware that faculty advisors are empowered to act in lieu of the Campus Hearing Board in event of any difficulties. *Any behavior that has negative impact upon your project, your partners, your other student colleagues, your advisors, your liaisons, or WPI's reputation will not be tolerated.* We expect that each of you will behave in a reasonable and responsible fashion, and will not engage in any behavior which is illegal or unethical, or which puts your health or well-being, or that of anyone else, at risk. *We will not hesitate to send you home in the middle of the term, even without a completed IQP, if your behavior has negative impact upon our activities in Nantucket, or if it puts you or anyone else at risk.* Have a good time, make new friends, see the sights, but *be careful, be safe, and take care of each other.* Don't do anything that you, or anyone else, will regret later.

Educational Philosophy—How to Excel in Your IQP

You will probably not benefit much from your IQP, or contribute much to it, if you just sit back waiting for someone—your partners, your advisors, your liaison—to tell you what to do. It is up to you to set your own goals, determine your own strategies, and assess your own progress. Discuss ideas with your partners, with your liaisons, and with your advisors. Ask questions. Do something extra that wasn't "assigned." We have found that students who succeed in their IQP typically focus less on getting an A and more on doing a great project. The best way to do well on an IQP is to "get into it."

Of course, your advisors and sponsors have an obligation to work with you in a manner consistent with these educational goals. As paying customers, you have the right to expect prompt and useful feedback on your work, thought-provoking questions that illustrate key points, and sufficient access to us. We will work in earnest to provide you with a valuable learning experience in this project; if you are willing to assume responsibility as described above, you can expect to benefit significantly. If, at any time, you have concerns about the way in which your project is being advised or your access to us as advisors, please come to talk to us about it. If you feel that there is a problem you cannot bring to us, we encourage you to contact Anne Ogilvie (atogilvie@wpi.edu) in the IGSD or Charlie Morse (cmorse@wpi.edu) in the WPI Student Development and Counseling Center.

Project-Related Expectations and Guidelines



Since project activities are different than typical course activities, we feel it's important to clarify our expectations for your performance. In this section, we describe expectations for written drafts, presentations, meetings, teamwork, and leadership.

Written Report Draft Material

You will be writing your report as you go along, not at the end. You will receive separately a calendar with due dates for written materials. Unless we negotiate otherwise, you should consider the due dates and times as *deadlines that you are expected to meet*. Deadlines are necessary in order to keep the projects on schedule and to provide us sufficient time to review and return draft materials. Each revision and feedback cycle is a major opportunity to move the document forward, so if you miss one, the outcomes are likely to suffer. To meet deadlines you will need to plan ahead and not take the chance that a printer or computer will malfunction or not be available to you at some key time. Similarly, it is your responsibility to manage document revisions and back up your work and data systematically. Wherever you do your work, you will probably be sharing computer resources with other people. If you do not wait until the last minute, then you should have fewer problems in this regard.

We will place an emphasis on a well-organized, tightly written report. The organization of the ideas will be particularly important since it requires a synthesis of ideas and critical thinking. Grammar, spelling, and syntax are also important but we will not note every grammatical problem. We expect that you know or will learn basic rules of grammar and style.

All draft submissions should be critically edited by the group. This means that anything you submit belongs to the whole group, and should represent the best writing that your group can produce. The quality of your draft submissions will influence your final grade, since final drafts may well reflect a lot of input from your advisors. Draft material should be neat and complete; content and form are both important.

With every revision of a previous draft, each team should submit a short cover memo, briefly summarizing the rationale for major changes in content and organization, how you attempted to respond to our “big picture” comments, and anything in particular that you would like feedback on. Please use this memo to help us know where to focus our time and attention.

With every draft you should also submit the current Table of Contents of the report, showing your organization of sections and subsections. Remember that section headings should be sufficiently descriptive such that someone could predict accurately the content of that section without reading it.

Responding to advisor comments is an essential part of the writing process. The purpose of our comments is, first and foremost, to advance your critical thinking and argumentation, and also to help you write more clearly. Our goal when giving feedback is to be a “helpful reader.” Our comments will sometimes be in the form of a question, or a description of how we’re feeling as a reader at a particular point in the document. *All types of comments, even if they do not suggest exactly what you should do, should result in some sort of revision or response.* Since we value independent thinking, we do not want or expect you to blindly “do what we say” but we do expect you to consider and act on our feedback sincerely and thoughtfully. We encourage you to address problems in your own way, or clarify your position in a way that addresses comments. If you submit a draft in which you have not made changes in response to suggestions we made or questions we asked on the previous draft, attach some explanation as to your reasoning, or explain what you’re still working on. Similarly, if you do not understand our feedback, please ask for clarification. *Without evidence otherwise, we assume that lack of response to feedback means lack of effort or close-mindedness.*

For each new writing submission, we will expect to see lessons learned from previous submissions. We will be looking for you to apply our previous comments as you draft new chapters of the report. For

example, the importance of introductory paragraphs, “researcher’s voice”, logical and coherent organization, and use of evidence applies to all chapters of the report. The “first drafts” that you should submit to us should not be *your* first draft. For example, in first drafts of a section or chapter, we will expect to see tight paragraphs with topic sentences and introductory paragraphs for sections and chapters.

Presentations

The calendar also indicates approximate dates for practice and final presentations; you may conduct additional presentations to your sponsor liaisons and other along the way. Learning to give effective and informative presentations is a key objective of your project experience, and my evaluation of your work will be influenced by the extent to which you participate in these presentations in a professional and appropriate way.

It is important that your presentations be *well-rehearsed*; you will be kept to strict time limits. You should always have professional, attractive, and appropriate visual aids. When you are using PowerPoint, it is your responsibility to make sure the equipment is set up, and to come in early to load your presentation and make sure everything will work. Some backup plans are a very good idea for final presentations, due to the unpredictable nature of technical problems.

Whether you are giving a final presentation for a distinguished audience or an interim presentation, the most important thing is to show respect for your audience. This can be done by preparing carefully, by keeping your presentation informative and enjoyable, by staying within your allotted time, and by dressing in an appropriate fashion.

Meetings

Although there will be many informal gatherings of the group, advisors, and liaisons throughout the course of the project, in most cases you will also be having weekly scheduled project meetings. As with the preparation, we expect you to lead these in a professional manner and to be on time. You may also be responsible for finding a place to hold them, and to make sure everyone who needs to know about the meeting is informed. You will need to exhibit flexibility; some liaisons may expect you to run the meeting, while others may have plans for how the meeting will proceed.

Remember that as professionals, you need to make a conscious effort to *speak clearly and precisely*, avoid slang and idiomatic expressions, and in general do what you can to make yourself understood. This is a good opportunity to work on any unproductive verbal habits you may have, such as saying “like” or “um.” Mumbling or speaking too rapidly will also cause difficulty. In your written agendas and conversation, aim for direct, clear, conventional English.

For each meeting you should prepare and distribute a *concise* but complete summary of the group's *major* accomplishments and activities (note that sending an email is not a major accomplishment) since the last meeting and your plans and objectives for the immediate future, in the form that can also serve as the framework of the meeting agenda. (It is not necessary for you to distribute the agenda in advance of the meeting.) Also include any problems or questions you want to discuss. One page will usually suffice, but please remember that the agenda should convey content, not just topics.

Do not give long lists of trivial accomplishments, and do **not** include mention of drafts that you’ve completed. Questions about writing the report should be discussed with just the advisors since the liaisons typically aren’t involved in its development. We can schedule separate meetings as needed to discuss the report. For example, instead of writing “Worked on draft of Background,” which isn’t particularly important to liaisons, “Found more background material on cross-cultural marketing strategies” would be more informative to all of us, and in the meeting you could expand on key points that you learned and ideas you have for applying them. *Focus on significant findings and important, underlying issues.* As part of the agenda packet you should also include copies of any materials you have developed or are working

on, such as interview questions, data analysis, or any other project content you wish to discuss at the meeting. Please leave plenty of time in each meeting for feedback from us and your sponsors, and be prepared for sponsors to propose topics they wish to discuss.

One member should be prepared to run the meeting, but each member is expected to attend and participate in all meetings. *Aim for equal participation in meetings.* So that we and your sponsors are aware of your contributions and roles, it is important that each member take responsibility for some aspects of the project and handle the corresponding portions of the meetings. (At the same time, however, all team members should be reasonably articulate about all aspects of the project.)

Meetings just between your advisors and your group can be less structured, but you are still expected to plan the meeting by identifying topics to discuss, have materials to hand out as appropriate, and run the meeting yourselves.

*Please note that all data gathering instruments (e.g., interview protocols, observation protocols) **must** be reviewed by us and your sponsors before use, and should be pre-tested wherever possible.* This type of review is essential to make sure that your questions are appropriately worded and constructed to maximize the quality of the information gathered. Be sure to schedule in time for this review and pre-testing.

Much happens in a week at the project center, so in order to give us and your liaison the opportunity to provide you with useful input and feedback, it is important that you keep us all updated regularly. If something important comes up between meetings, do not wait until the next regularly scheduled meeting to address it—get in touch with us and/or your sponsors as soon as possible.

Teamwork

Your career success will depend on your ability to work effectively with people who have different perspectives, attitudes, and backgrounds than you. One of the most important skills you will be asked to develop during this project is that of effective teamwork. The basis of good teamwork is a shared desire for the team, and not just individuals, to excel. *Although you will receive individual grades for this project, you will be evaluated on how well you have worked within the context of the team, not as an individual achiever.*

It is very important to have lots of team discussion time prior to meetings with advisors and liaisons, and when major decisions about the project need to be made. Your partners should always know what you are going to say during a meeting—*never “spring surprises” on each other.* Avoid passing in material that you have worked on alone and not shown to your partners. Put everyone's name on everything, in alphabetical order. Do not denigrate the performance of your partners in front of your advisors or liaisons. Spend meetings performing as a team rather than highlighting your own accomplishments. In meetings, you should find yourself saying “we” more than “I”—just make sure that you have discussed and agree upon statements where you use “we”!

A major challenge that advisors face is evaluating the teamwork component of projects. Although we will see you in action during formal and informal meetings and will see the outcomes of your work, we rarely see the “daily grind” and process of teamwork behind the scenes. Some teams try to hide concerns about individuals’ efforts or their team processes thinking that bringing it out in the open will reflect poorly on their group dynamics. Judgments that advisors make in such situations can be inaccurate and unintentionally unfair. Of even more concern in these situations is the fact that teams do not learn much about effective teamwork. Even teams that work very smoothly together may not in fact learn much about teamwork if they do not reflect on the processes that they used. Imagine yourself in an interview with a potential employer: “I was lucky. My team got along really well!” does not convey that you learned anything about team development. Our goal is not for you to get along well – it is for you to make

progress in effective teamwork. Accordingly, we will expect each team to use the **TEAMWORK ASSESSMENT PROCESS** explained here. The process consists of two parts: formative and summative.

Formative Team Assessments: The word “formative” means for purposes of improvement. Twice during the term, each team is asked to submit one of these assessments, which has two components:

- a. *Team process and products:* Each team member should assess project progress and identify strengths and areas for improvement for the team as a whole. You may wish to review the rubrics at the end of this document for ideas on important areas of team performance.
- b. *Individual performance:* Each person should assess his/her own performance and contributions of group members. Identify several areas of strength and several areas for improvement for every person on the team, including him or herself. (No grades, no numbers, just areas of strength and areas for improvement.) Again, consult the rubrics at the end for important areas of individual performance.

After individuals have prepared items *a* and *b*, the team should gather together and discuss everyone’s assessments as a group. Submit a single report to advisors that contains the following items:

1. All individual input (items a and b above).
2. Specific actions that the team will take to improve its performance. Please note that a specific action is different from a goal. For example, *be more focused* is a worthy goal, but NOT a specific action. *Close web browsers in an effort to maintain focus during the day* would be a specific action.
3. Specific actions each team member commits to take to improve personal effectiveness.

Summative Team Assessments: “Summative” assessment happens at the end. The summative assessment has three purposes: a) encouraging reflection to help your future teamwork experiences; b) documenting learning outcomes of the IQP specific to teamwork; and c) providing information for our evaluation of teamwork and individual contributions, in a way that’s aligned with the rubric at the end of the manual. There are two components of what you should submit—one composed by each team and one composed by each individual:

1. **FROM EACH TEAM, IN AN APPENDIX OF THE REPORT:** Prepare a reflective statement that responds to the first two rows of rubric #3 (“team as a whole”). Identify strategies that you learned that led to effective team outcomes, and any areas in which you realize you’ll need to improve in future teamwork experiences. Use evidence and specific examples in this statement; we’re not interested in superficial claims or generalities. This piece of writing should be polished and should be no more than one page.
2. **FROM EACH INDIVIDUAL, SENT TO ADVISORS (i.e., NOT IN REPORT):** Prepare this document individually and send it to both of us (include your name in the file name) by Thursday December 14 at 5pm. This individual statement should include a self-assessment and an assessment of each team member:
 - (i) In the self-assessment, reflect on what you learned about yourself and how you work in a team that you will carry into your next teamwork experience. We expect you to be self-critical, identifying both strengths and areas for improvement. Within this statement you should be responding to the last three rows of the teamwork rubric (“individuals”), again making use of evidence. This self-assessment should likely be several paragraphs.
 - (ii) The assessment of each team member (one or two paragraphs) should identify major contributions to the project not evident on the authorship page. In addition, comment on the person’s commitment, attitude, and effort to improve and respond to feedback.

Through this process we are trying to develop your ability to self-assess, and to constructively assess the performance of others, since that will be so important in your professional career. *Ultimately, we will still need to make a judgment about your teamwork process, but it will be an evaluation of your team's self-assessment and improvement.* (See the Project Grading Rubric for details.) Critical, thorough, reflective assessments that reveal team conflicts and successes will be evaluated much more highly than superficial, self-congratulatory assessments that show little learning about the complexity of teamwork. We expect that you will face challenges in working together and managing conflicts in a constructive way. Our goal is to bring those challenges out in the open to promote communication and most especially, learning.

There are instances where it would be appropriate for individual students to consult with advisors regarding a team situation they are struggling with. In these cases we would want to hear how you and the team have attempted to address the problem. In our experience, many challenges arise from the fact that most students have not had much experience in active listening and giving constructive feedback to others. Following are a few good practices:

- Team members' *opinions* are not usually relevant or useful in project work. What really matters and what will advance your project is your *analysis* of choices and issues. Analysis is different from opinion in that it involves use of evidence and/or use of criteria in decision making.
- Instead of formulating a response in your head while others are speaking, listen to them with the intent of understanding, then paraphrase what you think they said. Repeat until you get it right.
- Constructive feedback depends upon the following realization: each of us can be an expert on our own feelings and on how other peoples' behavior affects us, but we have no idea of other peoples' feelings or how our behavior is perceived by others.
- Try using the following when giving feedback to others: *When you/we...* (FACTS of observable behavior, without judgment or exaggeration)...*I feel...*(explain how the behavior affects you)...*because I...*(explain connection between observable facts and your response). *I would like...*(describe the change you would like to see)...*because...* (why you think the change will help). *What do you think?*... Listen to response, ask for and give clarification, discuss options, and agree on a solution.

Many of these suggestions were drawn from <http://lowery.tamu.edu/Teaming/Morgan1/sld054.htm>, which contains more information and examples.

Evaluation

Project grading is difficult because of its multidimensional nature and since students and advisors develop a working relationship during the project. Project grading is also very different from course grading. In a class, "correctly" completing all assignments and evaluations (designed by the professor) earns a student an A grade. However, projects have no "correct" solution. An A project grade requires that students go beyond what is expected and demonstrate originality, initiative, and creativity. Students sometimes feel that lots of hard work deserves an A; certainly, you are likely to devote more effort to this project than anything you've done thus far at WPI. However, advisors must and do evaluate work based on outcomes, not just effort – as happens in the real world.

Project grades reflect not only the final products (e.g., results, reports, presentations, etc.), but also the process by which they were attained, including steadiness of effort (not a last-minute crunch), teamwork, quality of drafts, and self-direction. Our evaluation criteria are aligned with the intended learning outcomes of the IQP listed earlier in this document. At the end of this document we have organized these outcomes into four groups, and we elaborate on various levels of achievement (at the A, B, and C level) for each. We will ask you to refer to these *rubrics* regularly for self-assessment and improvement. About halfway through the term, we will give you feedback relative to these criteria, to make sure you understand our assessment of your progress.

At the conclusion of the project advisors must assign a single project grade for each student. The available project grades and their interpretations are as follows:

A: *Consistently excellent work* that attains, and perhaps exceeds, project goals. Characteristics of A work include meeting all requirements of the B grade, then exceeding them in several areas such as particularly effective or creative goals and/or methodologies, initiative, originality, depth and critical thought in analysis and recommendations. Students take the lead in discussions and analysis rather than just responding to faculty suggestions (particularly as the project matures). Teamwork self-assessment shows critical thought and tangible evidence of learning. Any individual earning an A will have been assessed positively by his or her team members, with tangible and appropriate evidence to support the assessment.

B: *Consistently good work* that attains project goals. Characteristics of B work include: following up on advisor suggestions; defining a clear goal and objectives; writing a clear, professionally presented report with good and improving drafts along the way; completing all work in a timely and satisfactory manner; demonstrating sound analysis that includes logical interpretation of findings; delivering useful recommendations; coming to meetings well prepared, and working hard, consistently, and diligently. A B grade means the team did a good, strong job, but perhaps did not show lots of initiative, originality, or critical thinking in a self-directing and proactive manner. The teamwork self-assessment shows reflective ability and tangible evidence of learning. Any individual earning a B will have contributed consistently to the team effort, with tangible and appropriate evidence to support that assessment.

C: Acceptable work that partially attains project goals. Characteristics of C work include meeting some but not all requirements for a B grade; writing that is readable but didn't show much progress between drafts and required lots of faculty input; weaknesses in methodology and analysis that could have been anticipated and addressed, and demonstrating little or no originality and initiative. Missing deadlines, missing meetings without prior notification, and lack of response to faculty comments on report drafts are traits common to C-level performance. The teamwork self-assessment may show little evidence of critical introspection or learning about teamwork, or avoidance of conflict. An individual may earn a C, even if the project as a whole is evaluated more positively, if his or her contribution is sub-par, with tangible and appropriate evidence to support the assessment.

NR: This grade denotes effort insufficient for registered credit. Characteristics of NR work include doing very little throughout the project; missing several meetings without prior notification; coming unprepared to meetings or having little to show; repeatedly missing deadlines; turning in substandard work; not completing assigned tasks and showing little or no initiative and originality.

NAC: This grade is reserved for performance that is unacceptable for credit. It means that a student's performance (or lack of it) has seriously impeded group progress, or it has embarrassed the group, the project sponsor, or WPI. Note that this grade remains on the transcript.

Upon completion of the project, you will receive an *individual project grade*. As mentioned previously, each team member should be assuming the primary responsibility for certain aspects of the project. At the same time, however, each team member should be familiar with all aspects of the project and be able to discuss the project in an in-depth, articulate manner. Also remember that individuals are assessed in the context of team effort. Note that in the evaluation rubrics, some elements are examined at a team level and some at an individual level to reflect the importance of both.

Based on the QQPs, we believe that each team has the potential to complete an excellent project. We are here to help, but it is largely up to you to keep pushing yourselves to bring your project to the highest possible level.

Guidelines for Daily Life on Site

Be sure to read *Going Global at WPI Handbook*, which contains detailed information about expectations and WPI policies. We expect that you will read it and comply with the guidelines. We will not repeat *all* of that information here, but a few guidelines are worth repeating here:

- You are responsible for any damages you cause at the MMA dormitory.
- You are not allowed to have any overnight guests in your rooms.
- Do not do anything to jeopardize WPI's relationship with the MMA or your sponsors.

We are lucky to have such an excellent location, so please make a good impression and be courteous to your neighbors! Don't make a lot of noise at night in the rooms or on the street.

Email, Cell Phones, and Other Communication

During the term we will need to communicate with each other to arrange meetings, find each other when lost, or say 'I am delayed.' E-mail will be a useful means of regular communication; it's probably a good idea for each member of the team to check e-mail daily. The most convenient way to communicate simple (and urgent) messages will probably be text messaging with cell phones, however. Please sure you always have your cell phone with you, charged, and on. Of course, you should be sure the ringer is off when you are in meetings, at the library, in a restaurant, or in other places where cell phone use might annoy someone. If we as advisors need to get information to a team or to the whole group, we will consider the job done if we contact one student and ask the student to relay the message. It is your job to spread the word regarding meetings, etc. to your partners and to other groups when you are asked to do so.

We look forward to talking with you—either arranged meetings or just informal chat—after you get home from work or at other time. We are always interested to hear how things are going, but please don't call or stop by after 9:00 PM, or before 7:00 AM, unless of course there is an emergency. **Note that in the event of any emergency, you should not hesitate to call either of us at any time of day or night.**

Printing Needs

We will try to handle drafts electronically to the extent possible, but you may need to print things on occasion. The ideal case is for you to use printers that may be available through your liaison.

Project-Related Expenses

The first source to approach politely for support is your agency or liaison; after all, they are getting valuable work from you. If your liaison or agency is willing to provide you with services, supplies, etc., you are expected to gratefully take them up on this offer! After you have explored that avenue, WPI can provide you with reimbursements for some project-related expenses that your liaison cannot cover, with the following qualifications:

- You will not be reimbursed for the first \$150 per student; this must be paid out of your own pocket. This is WPI policy—the idea is that students are expected to cover some level of expense, such as books or supplies, associated with any activity. *You will need to provide evidence (i.e., receipts) of these initial expenses before we begin reimbursing you for additional project expenses.*
- All expenses should be borne equally by team members.

Note that it is unlikely you will need to spend enough to qualify for reimbursement, unless you have significant project-related travel. If you anticipate reimbursable expenses, please talk to us early on.

In order to avoid confusion or misunderstandings, you must follow these procedures to get reimbursed:

- All expenses must be approved by the advisors before you spend the money.

- Anyone incurring approved expenses who wishes to get reimbursed must provide an expense summary listing what the expenses were, as well as the receipts. *You will not be reimbursed for any expense unless you have a receipt.* This includes travel, communication, or any other expense.

Staying Healthy

In order for you to perform well on your project, it is essential for you to stay healthy on several levels—physical, mental, and emotional. Very simple things like **getting plenty of sleep** and eating well are especially important when your system is under the strain of living in a new place.

We are all likely to be missing people from back home, and it is important to stay in touch with them. However, spending hours a day sending email or texts is only going to make matters worse on multiple levels. It generally tends to exacerbate feelings of loneliness, and you should not divert that much time away from your project on weekdays. A much more effective means of coping with loneliness is to stay busy, to take advantage of being in Nantucket, to talk to others, and perhaps to keep a journal and send old-fashioned letters. It would also be wise to discuss these communication issues with loved ones before you leave.

Weekend Travel

You must complete the Google Drive itinerary matrix **by 5:00pm every Thursday**, even if you are staying at the MMA for the weekend. *If you are going to be away overnight from the student housing at any time during the week or over the weekend, you must tell us by e-mail before you leave: your destination, where you're staying, an alternate phone number to your cell phone (since batteries die and reception can be spotty in places), how you plan to get there, and the time you plan to return.* This is not optional; it is essential that we know where you are, in case someone from home needs to contact you. Be sure to take key telephone numbers with you (advisors, other students) in case of an emergency while you are away. *We will not take late returns lightly; spare us and your family a lot of worry by calling us if for any reason you are going to be returning later than expected.* Be advised that the ferries are often cancelled during major storms due to the difficulty of docking in high winds, so you will need to keep an eye on the weather and plan your trips to and from the island accordingly.

Project Grading Rubric

1. Formulate and complete a project that addresses a combination of social, cultural, humanistic, and technical issues			
<i>IQP learning outcomes: 1-5, 9; Sources of evidence: Meetings, presentations, report, and project implementation in general</i>			
	Excellent (A)	Good (B)	Fair, Acceptable (C)
Goal and objectives	Project has a well-conceived and clearly stated goal and objectives, and the goal is achieved.	Project has a stated goal and objectives, and the goal is achieved.	Project has a stated goal and objectives, and the goal is partially achieved.*
Background and project context	A sophisticated understanding of social, cultural, and technical issues related to the project is evident throughout the students' work	Shows a good understanding of social, cultural, and technical issues related to the project	Does not consider some important social, cultural, and/or technical issues related to the project or shows a poor understanding of them, limiting project outcomes and credibility.
Methods	Students select and implement sound methodologies to achieve the goal, understanding and communicating their limitations.	Students select reasonable methods, and implementation of methods is mostly sound. Limitations are acknowledged.	Weaknesses in methodology are often unrecognized or could have been anticipated and addressed, or students do not approach project systematically.
Analytical thinking	Students analyze data or design alternatives systematically, in-depth, and with critical thinking	Data or design alternatives are analyzed mostly systematically. Critical thinking is usually evident.	Little evidence that a systematic process was used to analyze data or design alternatives. Critical thinking is often weak.
Recommendations or other deliverables	Delivers clear, comprehensive recommendations to the sponsor that are well supported by project findings	Delivers useful recommendations to the sponsor that are supported by project findings	Recommendations may not be useful to sponsor or are weakly supported by project findings

**Sometimes the project goal is not entirely achieved for reasons that are beyond the students' control. Advisors evaluate only what is within the students' control.*

2. Communicate the process and outcomes of the project persuasively and professionally both in written and oral form			
<i>IQP learning outcomes: 7,8; Sources of evidence: Presentations, report</i>			
	Excellent (A)	Good (B)	Fair/Acceptable (C)
<i>Team Products</i>			
Use of guidelines and feedback	Students clearly make use of writing guidelines, such that each section meets its expected purpose. Students learn from advisor feedback such that advisors' role in writing improvement decreases as project progresses.	Students attempt to make use of writing guidelines, and each section/chapter mostly meets its expected purpose. Reliance on advisor feedback for writing improvements may be steady throughout the project.	Students often do not make use of writing guidelines. Report requires high levels of advisor effort to make it acceptable.
Persuasion and use of evidence	Writing and presentations reflect critical thinking: claims are persuasive because they are supported by credible evidence and because they are qualified appropriately.	Clear progress is shown in making writing and presentations more persuasive. Most claims are supported by credible evidence and are qualified appropriately, but some are overstated or exaggerated.	Some progress is shown in making writing and presentations more persuasive, but many claims are still not supported by credible evidence or qualified appropriately.
Organization and coherence	Writing and presentations are logically organized with a coherent line of reasoning. Formatting assists in conveying structure of paper or presentation. Paragraphs feature clear topic sentences and are tightly written about that point. Almost all transitions are smooth.	Writing and presentations are usually logically organized with a coherent line of reasoning. Formatting usually conveys structure of paper or presentation. Readers occasionally struggle through wandering paragraphs or unclear transitions.	Writing and presentations don't show much improvement in organization and coherence, and readers often struggle to identify a line of reasoning.
Clarity and writing mechanics	Writing is mostly clear and concise. Active constructions and a "research voice" is used throughout. Mostly free of errors in writing mechanics (e.g., grammar, spelling, punctuation, sentence structure). Word usage is almost always varied and appropriate.	Writing is usually clear and concise. Passive constructions may occasionally obscure meaning, and some writing may be conversational in tone. Most elements of writing mechanics are correct, and errors do not obscure meaning. Word choice sometimes does not convey intended meaning.	Frequent writing errors begin to obstruct meaning or cast doubt on the credibility of the authors. Overuse of passive constructions may obscure meaning and make reading hard to follow. Word choice often does not convey intended meaning. Conversational tone may not be consistent with credible research.
Visual aids	Visual aids are creative, engaging, and convey messages effectively to diverse audiences.	Visual aids are professional and add value beyond spoken remarks.	Visual aids are professional but do not add much value beyond spoken remarks.
<i>Individual Products</i>			
Quality and extent of writing contributions	Authorship page indicates a substantial writing contribution. Produces writing of good quality that requires minimal revision and editing by team members.	Authorship indicates a reasonable amount of writing contribution. Produces writing of sufficient quality that team members can proceed with reasonable levels of revision and editing.	Authorship indicates few writing contributions. Or produces writing of insufficient quality such that it cannot be used without substantial revision from team members.
Presentation skills	Demonstrates professional presentation skills. Clearly prepared and succeeds in engaging the audience.	Shows noticeable effort and improvement in presentations skills. Clearly prepared and attempts to engage the audience.	Shows some effort and improvement in presentation skills. Sometimes does not seem prepared or is unable to engage the audience.

3. Work productively as a team, make effective use of all person-power, and reflect critically and constructively on group process			
<i>IQP learning outcome: 6; Sources of evidence: Teamwork assessments, meetings, report authorship</i>			
	Excellent (A)	Good (B)	Fair/Acceptable (C)
	<i>Team as a whole</i>		
Teamwork monitoring	Our team can identify specific processes, norms, and/or guidelines we use to work effectively and respectfully together. We regularly monitor our group processes along with individuals’ ideas, feelings, and contributions. We can identify actions or adjustments made as a result.	Our team can identify processes, norms, and guidelines used to work effectively and respectfully together. We regularly monitor our group processes along with individuals’ ideas, feelings, and contributions. We may have some difficulty showing useful, tangible outcomes and actions from that monitoring.	Our team attempted to develop processes, norms, or guidelines to work effectively and respectfully together. We tried to monitor our group processes but often did not succeed in making adjustments. We tried but did not always succeed in monitoring individuals’ ideas, feelings, and contributions.
Team critique and conflict identification	Our team reflects critically on its effectiveness and communicates with each other and with advisors regarding challenges it is facing and how it has responded effectively to those challenges.	Team reflects on its effectiveness and attempts to communicate with each other and with advisors regarding challenges it is facing and how it has attempted to respond to those challenges.	Team does not critically reflect on its effectiveness or does not communicate with each other or with advisors regarding challenges it is facing. Conflict avoidance.
	<i>Individuals</i>		
Reliability, effort, quality of work	Partners would say that I am always reliable, and deliver my best effort and high quality work.	Partners would say that I am almost always reliable and deliver solid effort and good quality work.	Partners would say I am inconsistently reliable and don’t always deliver solid effort. Quality of work sometimes suffers.
Openness to feedback	When partners or advisors target an issue that relates to me, I am not defensive and always open to discussion. I try to resolve the issue promptly and succeed in doing so.	When partners or advisors target an issue that relates to me, I am usually not defensive and am usually open to discussion. I try to resolve the issue promptly and usually succeed.	When partners or advisors target an issue that related to me, I sometimes am defensive or not always open to discussion. I still try to improve the situation satisfactorily.
Self-assessment and response to feedback	I show critical introspection in identifying my strengths and weaknesses as a team member from the perspective of diverse others. I can identify specific actions I have taken to modify my behavior.	I can identify my strengths and weaknesses as a team member from others’ perspectives. I can identify some general ways in which I have attempted to modify my behavior.	I can identify some of my strengths and weaknesses as a team member but not always from others’ perspectives. I have difficulty showing evidence of actions I took that led to noticeable improvement.
Support for other team members	I regularly share my feelings and opinions and elicit those of others. I give constructive, actionable feedback to team members and support their efforts to improve.	I usually share my feelings and opinions and consider those of others. I show attempts to give constructive feedback to team members and support their efforts to improve.	I occasionally share my feelings and opinions and sometimes disregard those of others. I show little progress in learning to give constructive feedback to team members.

4. Show professionalism			
<i>IQP learning outcomes:</i> All, but especially 6 ; <i>Sources of information:</i> Project implementation, meetings, development of report and presentations			
	Excellent (A)	Good (B)	Fair/Acceptable (C)
Conduct of meetings	Meetings between the team and advisors/liaisons are useful and productive. The team is always well prepared, and all team members have a meaningful role in meetings.	Most meetings between the team and advisors/liaisons are useful and productive. The team is almost always well prepared, and all team members usually play a role.	Team often comes to meetings unprepared, or not all members are engaged. Advisors often step in to ensure that important and useful discussion occurs during meetings.
Initiative	Students take the lead in project formulation and implementation. They are proactive and take initiative. They become increasingly self-directed with positive outcomes.	Students become more self-directed and less reliant on advisors as the project progresses. They are usually proactive, take initiative, and show some independent thinking.	Students are often reliant on direction from advisors to deliver a quality project. They do not show much initiative or original independent thinking that is sound.
Overall use of feedback	Students respect feedback from advisors and liaisons, critically reflect on it, ask for clarification when necessary, and always respond to the feedback in recognizable ways.	Students respect feedback from advisors and liaisons and attempt to critically reflect on it. They usually ask for clarification when necessary and respond to the feedback in recognizable ways.	Students don't always value feedback from advisors and liaisons and may not reflect critically on it. Feedback that isn't understood is often ignored, or team does not respond to feedback in recognizable ways.
Attitude	The team always responds with a positive attitude to unexpected changes in the project. They consistently show flexibility and adaptability.	The team usually responds with a positive attitude to unexpected changes in the project. They attempt to be flexible and adaptable.	The team has difficulty responding positively to unexpected changes and tends to get bogged down by them.
Commitment	The team is always in "continuous improvement" mode, shows intrinsic motivation to deliver the best project they can, and shows a commitment to learning.	The team is clearly committed to delivering a high quality product. May rely on advisors' evaluations in deciding how much effort to expend.	The team does what is necessary to deliver an acceptable project.