

PQP SYLLABUS

Goals and Objectives

Role of advisor(s):

- Provide project “guidance” rather than project “instruction;”
- Encourage critical thinking;
- Push students to realize their greatest potential;
- Create a learning environment based upon openness, trust, and respect;
- Establish milestones to encourage timely work;
- Provide advice and/or resources for group effectiveness.

Advisor(s) expectations of students:

- Demonstrate knowledge of the relevant literature and other background sources; evaluate this material critically and apply it appropriately to the project work;
- Have clearly stated, achievable goals;
- Achieve the goals;
- Design a sound approach; understand and apply appropriate methodologies; use appropriate controls;
- Arrive at conclusions and recommendations that are supported by the results;
- Effectively present the methods, results, and conclusions, orally and in writing;
- Take initiative: students should make the project their own, and pursue its completion independently; (Advisors advise and consult; they should not have to dictate.)
- Work smoothly with each other and with advisors, meeting deadlines and conducting work in a timely fashion;
- Lead meetings with advisors. It is your responsibility to make sure they are productive;
- Fulfill responsibilities to partners, advisors, and other students;
- Effectively document and report information about the project, in written and oral form progress reports, drafts and presentations are the primary means by which you convey your work to your advisors; we expect that these materials will represent your best efforts;
- Be flexible, and take adversity in stride;
- Grow and learn;
- Have fun doing YOUR project!

Weekly Meetings

The IQP is a learning experience in several dimensions. One of these is a professional dimension. You will be working with professionals, and we expect students to learn how to properly function in a professional environment. This covers everything from conducting a meeting to proper dress.

1. **Arrive on time.** Please let your team members or advisors know in advance if you have to miss a meeting for legitimate reasons.
2. **Be prepared.** This includes completion of weekly tasks and writing assignments.
3. **Bring an agenda.** Agendas typically include weekly accomplishments, questions or issues needing attention, and plans for the upcoming week.
4. **Take minutes.** At least one person should do this, and you should rotate minute-taking duties for each meeting. Alternatively, each person could take notes and the team later combines them into one set of minutes. Minutes are typed up and sent to advisors (and sponsors during B term) by the next business day.
5. **Dress appropriately.** For PQP meetings this means normal attire for attending classes, except please remove outerwear and all caps and hats. For sponsor meetings, attire will include business dress appropriate for the agency. Usually this is a collared shirt and tie for the men and business suit for the women (with appropriate shoes in each case---no sneakers).

The project team has the responsibility to “run” weekly meetings. Each week a different team member is expected to facilitate the meeting.

To facilitate meeting planning and to alert us to the issues you will raise, a weekly progress report /agenda for each meeting will be due to participating faculty via email by **5 PM** the day before your PQP meeting. These exercises will help us, all of us, assess your weekly progress. You will be required to prepare weekly meeting agendas and minutes for the PQP.

In addition to a weekly agenda, teams will be required to prepare minutes from each meeting, whether a regularly scheduled meeting or an “extra” session. Each week the group should assign one member to act as “secretary” for the weekly meeting. That person should also take responsibility for typing and disseminating those minutes to team mates and advisors. Minutes are due 24 hours after meeting time.

Agendas:

- ***Accomplishments in the previous week.*** Instead of just providing a laundry list of topics or tasks, really try to make your report informational, so that it has some take-away value. What specifically did you learn? What major issues emerged? What key resources did you find? Where appropriate, include attachments as part of an agenda “packet” in order to provide more information. *Do not list “trivial” accomplishments such as sending an e-mail, making a telephone call, etc., nor should you list obvious, routine things such as going to meetings and classes. Focus on substantive accomplishments of interest to the attendees, and especially on the outcome of your efforts.*
- ***Plans for the next week.*** Again, focus on substantive plans and what you intend to accomplish by the next meeting. Be specific, and include who will be doing what. Please don’t include assignments for the PQP. For example, instead of saying “write draft of background”, discuss specific tasks that you might need to do to help accomplish the assignment. It’s okay if your list of plans to do for next week is relatively short. Remember however that a component of an “A”

project is initiative and creativity. In other words, come up with ideas that your advisors didn't suggest.

- *Issues to discuss with advisors or questions to ask them.*

A way to gauge the appropriateness of these agenda items is to ask yourselves if the content reflects the level of expected effort (outside of class) for a one week period, which is about 15 hrs/person! Are the outcomes of that number of hours evident?

You should also build into the agenda some time to discuss drafts that were turned in earlier in the week. This is a time for the advisors to offer feedback and for you to ask questions about the feedback.

Remember that each team member should participate in every meeting, with responsibility for some subset of the agenda items. The chair's role is to keep the meeting on track, not to report everything himself or herself.

Minutes:

Your agenda's structure suggests the topics and issues to be covered during PQP. The meeting's minutes reflects the actual discussion that took place. For the agenda that is well-planned the minutes will add substance to the topics and issues identified before the meeting, and thus fairly easy to complete. Minutes should also identify the outcomes and action items identified in the meeting, those in attendance, the time the meeting begins and ends.

Here are some important items regarding note-taking during project meetings with the advisors:

- Advisors get annoyed when they participate in project meetings in which no student is writing anything;
- Taking notes shows commitment and a good attitude toward the project---the kind of things that help students earn better grades;
- Although some advisors can be accused of talking just to hear themselves talk, most of what we offer is meant to help the group and is worth recording;
- Reporting those suggestions in the minutes is important---particularly for efficient follow-up;
- At the end of a meeting we will typically ask: "So what will you do this week?" When there has been little or no note-taking, the response is usually "Uh, I guess we'll....OK.....uh,...I didn't write it all down", or "We're going to do all the things we just talked about." Neither response is acceptable.
- When minutes read like: "Discussed improvements to next draft", that's not helpful. A better example might be something like: "Discussion on background research included:
 - contact Prof. XX about (topic)
 - check library at Univ. of YYY for reference on (topic)
 - investigate use of focus group methods for objective 6"
- At the following meeting, the team should have specific results that directly relate to each item. Note that follow-up can mean providing a valid reason for rejecting a suggestion. For example: "Joe contacted Prof. XX and she told him that ...(topic) wasn't important in our problem, so we don't need to worry about it", is way better than "Oh, we forgot you suggested to contact Prof. XX----we'll do it this week." The most frequent reason for the latter answer is that no one wrote down the suggestion during the meeting.

Grading Criteria

It is important that we communicate how we evaluate projects and assign grades. Project grading is difficult, particularly 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, an “A” project grade requires that students go beyond this level and demonstrate originality, initiative, and creative technical skills. Students generally feel that lots of hard work and a nicely presented report deserve an “A.” Most professors (including us) do not, unless there is real analysis, originality and technical depth in the total project effort.

Listed below are some specific guidelines on how we determine project grades. Your advisors may provide brief written term evaluations of the project as well as a term grade. Please ask if you have any questions about their meaning. Many of the grading characteristics described below are subjective and open to some degree of interpretation. Student attitude throughout the project can also affect how we, as advisors, make these subjective judgments. Students often ask at the end of a project how they can improve their grade. No project grade can be changed by last minute work; rather, only sustained quality effort over time will result in a good grade.

A: This grade represents a consistently excellent effort that **exceeds** explicit project goals. Characteristics of A work include meeting all project goals, and exceeding them in several areas such as development of project objectives, initiative, originality, depth of analysis, and creativity. This grade is reserved for performance that is exceptional and thus is not achieved easily.

B: This grade represents a consistently good effort that **attains** the project goals. Characteristics of B work include doing all that was asked in a substantially correct form; setting clear project goals, writing a clear, professionally presented report that has not required many drafts; completing all work in a timely and satisfactory manner; demonstrating sound analysis that includes logical interpretation of results; coming to meetings well prepared; and working hard, consistently, and diligently. A “B” grade means the group worked well and did a good, strong job. Students should be proud of this grade.

C: This grade represents an acceptable effort that **partially attains** the project goals. Characteristics of C work include meeting some but not all of the project goals; and writing a readable but average report requiring many drafts and lots of faculty corrections. Missing deadlines, missing meetings without prior notification, and ignoring faculty comments on report drafts are traits common to some C projects. Students who receive this grade have fallen short of expectations in a number of ways.

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; repeatedly missing deadlines; turning in substandard work; not completing assigned tasks and showing little or no initiative and originality. Sometimes we use the NR grade to limit credit for a project, even though acceptable work occurred during the NR’d term. Except in special circumstances, total credit on a project is limited to 1 unit.

SP: a grade denoting an effort sufficient for the granting of the credit for which you are registered. It will be used only under the rare circumstance in which the project advisor is unable to judge the quality of the work, yet can still determine that the granting of the credit is appropriate. This is usually a only temporary grade for an IQP.

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 advisor, the project sponsor, and WPI. Note that this grade remains on the transcript.

At the discretion of the advisor, members of the group may receive the same or individual grades. Thus, demonstration of individual contribution as well as group effort is important. Note that if a co-advisor or an off-campus sponsor is involved in the project, the evaluation is agreed upon by all the project advisors.