Important course considerations

These important considerations are things you should pay close attention to throughout the next two quarters. They have been gleaned from problems encountered and lessons learned by capstone teams over the past three years. Keeping these in mind will assist you in having a successful and rewarding project.

1. The nature of a “capstone” course

Demands a high degree of self motivation

✓ Any capstone course (including this one) demands that students proceed with a high degree of self-motivation. In more traditional classes knowledge is provided to you and specific problems are assigned without your initiative. However, in this capstone, you will need to take the initiative in the pursuit of knowledge and solutions to problems. Your instructors are there to assist you in the pursuit of knowledge and solutions, but it is up to you to direct that process.

Demands creativity & application of things you have learned in this and other courses

✓ A capstone course specifically requires that you employ knowledge, techniques, and resources that you have learned previously in other courses (e.g., in EHUF 462 or other courses relevant to the challenges you encounter).

2. Team projects

Teamwork / cooperation can be as great a challenge as the project

✓ Many actual restoration projects require a multidisciplinary approach involving engineers, lawyers, planners, landscape architects, cultural experts, artists, etc. as well as an array of biologists, ecologists, and other natural scientists. Given this need, some of the greatest challenges in a successful project often involve team dynamics. This will likely be the case for you as well.

✓ The capstone was designed purposefully to mimic this teamwork aspect of actual project situations. Surveys of potential employers revealed an overriding desire that students have practice in completing projects in such a team framework.

Treat team dynamics as carefully & creatively as project design

✓ Because of the importance of the team experience to the goals of the capstone and the success of your project you should treat the relationships and dynamics of your capstone team as a high priority. Do not simply expect it to fall into place on its own! Building strong relationships in any venue requires thoughtfulness and care!

Be creative about group responsibilities

✓ Your projects are much too large and complex for every person to be involved in every facet. Distribute tasks reasonably among team members keeping in mind each person’s strengths, knowledge, limitations, and desires. Communicate openly and frequently about sharing of responsibilities. You **MUST** be checking your email very **FREQUENTLY** and responding **PROMPTLY** for this to work (most groups will rely upon email as a
primary mode of communication, but you should allow for alternative modes if some team members have more difficulty accessing email regularly).

3. Team meetings with instructors
You have limited time

✓ Most team meetings will be only 30 minutes in length. Arrive ON-TIME and come prepared! Come with visual aids (maps, photos, etc.) in an organized fashion and a clear AGENDA for the meeting (topics, questions to be addressed, etc.). YOU will be responsible to lead the pace and direction of these meetings!

✓ If you don’t get all of your questions answered make a further appointment or plan to discuss things over email with your instructors.

4. Client relations
Treat your client with courtesy & respect

✓ Your client has accepted their role primarily because they have a project to complete. They are aware of the educational nature of your capstone, but their central concern is the successful completion of their project, fulfilling their needs as laid out in the RFP. You must keep in mind and respect their perspective in this regard. You should always treat them with respect.

✓ Your client(s) is a busy person with limited resources. If you want something from them, do NOT demand (or expect) an immediate reply. You must allow time for communication. You also need to accept the limitations of resources that your client has. If they are not able to directly supply resources you feel are necessary, then discuss things with your instructors rather than expressing dismay, horror, and disappointment to your client at the outset. Following such a consultation, your instructors may discuss the matter directly with the client if necessary or you may be directed to work with your client to creatively obtain the necessary resources (e.g., through grants).

✓ Express your appreciation for your client’s efforts & support! This relationship is critical to the success of your project. The quickest way to hamper a project is to not actively foster a good relationship with your client!

✓ Be careful of what may be perceived as criticism. Use words and modes of communication very carefully. Email is especially dangerous. Comments sent in an email that might be meant as simple statements can easily be perceived as unduly critical or abrasive by someone reading that email. If you are communicating about anything sensitive in nature, consider an in-person meeting first, a phone conversation second, and lastly a CAREFULLY worded email exchange. Also be very careful about what you place in public forums, such as on your web site. Material that might be perceived as sensitive should be discussed with your instructors first.

Assign ONE member of your team with good communication skills as the person to interact with your client

✓ A team communication leader should be designated to communicate with the client so that communication remains clear and controlled.
Do NOT, NOT, NOT flood your client’s inbox with flurries of emails among your team members!!! Be very judicious about when and what you communicate to your client. They do not want to see dozens of email exchanges about scheduling visits and other topics that do not directly concern them.

That said, you must also strive to keep your client informed about your activities and concerns in brief & to-the-point communications.

Contact your TA or instructors IMMEDIATELY if you perceive communication difficulties.

5. Project design
Many things feed into project design – these will be discussed in your handouts and in team meetings.

One thing commonly not considered strongly enough is the maintenance & monitoring environment that will be present for your project following its installation. You MUST consider the realistic degree of maintenance & monitoring a site will receive while designing the project. Certain approaches and materials may be available and appropriate only given a reliably high level of maintenance. Other approaches might be better if maintenance is to be more limited. You should assess the possibilities for long-term project maintenance in discussions with your client and instructors. Your client may have limited resources in this regard, but there may be other creative options available to you (community groups, educational programs, etc.). Once you have a vision of the likely maintenance possible, you should present options clearly to your client with your recommendation(s). This can be done in specific discussions or in your preliminary work plan.

6. Project challenges
Almost every project will encounter major hurdles in a variety of facets. That is the nature of these kinds of projects. You should not become dismayed at such events. View them as problems that can be solved – with the help and consultation of your instructors and client!