

EA 665 project identification, development and planning

We have learned that one of the more difficult parts of completing the Professional Project is conceiving, developing and planning for their project. To assist students in this process, we've developed the material and activities below.

This outline is designed for EA 665 students in the first semester of their project. **A satisfactory grade in the first semester will be assigned if the student submits a satisfactory complete study plan for their project by the end of the semester.** A well thought-out study plan will help students focus their thinking and also minimize “surprises” that could interfere with timely completion of the project.

The outline below contains two sections. Sections 1 and 2 are things for you to think about in choosing a project. Section 3 contains a set of activities that will guide you to completion of your plan and also learn about project planning.

- 1) What is a project?
 - a. Subject related to environmental assessment (confirm with instructor)
 - b. Original work:
 - a. May be original data acquisition or original analysis of existing data
 - b. If available, you may use employer data
 - c. EA faculty may also have projects
 - c. You will communicate this in both written and oral formats.

- 2) How to choose a project?
 - a. Who is interested?
 - i. You?
 - ii. Stakeholder audience (public or policy makers)?
 - iii. Scientific or technical community?
 - iv. Adviser?
 - b. What is the proper scope for a project?
 - i. Must be original work—either new data or original synthesis of existing information.
 - ii. Should demonstrate your ability to master subject matter, think critically, and communicate effectively.
 - iii. Large enough to satisfactorily address a question or issue.
 - iv. Contained enough to be feasibly completed within the time constraints (3 or 6 credits, 1 or 2 semesters).
 - c. What makes a project feasible?
 - i. How long will the project take?
 - ii. What resources will you need for the project?
 1. Are the data already available?
 - a. If you are using employer data, are they willing to have it be disclosed publicly?
 2. If you are gathering data, will it be primary gathering (measurements of field, lab or survey subjects)?
 3. Will you need equipment, materials, supplies or labor help?

- 3) How to go about formulating a project and study plan.
 - a. Prepare a one paragraph statement of purpose about your intended project, containing the following elements:
 - i. What is the overall problem you'd like to address (give the larger context)
 - ii. What is known about this overall problem?
 - iii. What is NOT known about this problem?
 - iv. How will you address the key part that is not known (you don't need to get detailed on the methods—that will come later, but you should give an initial indication of what you will actually do).
 - b. Share your paragraph with the course instructors and advisers.
 - c. Revise your paragraph according to the feedback received.
 - d. Conduct a literature review. This is an expansion of the brief paragraph above (3.a) and should contain the same elements:
 - i. Overall problem larger context and importance of the problem
 - ii. All that is known about the problem
 - iii. Your analysis of where the knowledge gap(s) are and why it is important to fill them.
 - iv. Instead of the brief methods statement in 3.a.iv above, here you could conclude your introduction/literature review with an objectives statement.
 - e. Share your Literature Review with the instructors and advisers.
 - f. Revise your Literature Review according to the feedback received.
 - g. Prepare an outline of the fleshed out project, containing the following elements:
 - i. Outline of specific methods, including data acquisition and analysis
 - ii. Expected results (not the “answer” but the form of your data and analysis).
 - iii. What are the potential pitfalls?
 - h. Submit your outline to the course instructors and adviser.
 - i. Prepare a timeline of the key steps in accomplishing your project.
 - i. Submit your timeline to the course instructors and adviser.
 - j. Prepare a detailed study plan, based on your outline. This should contain all the elements in your outline and timeline, but fleshed out and in paragraph form.
 - i. Share your study plan with course instructors and adviser.
 - k. Revise your study plan based on feedback received.