ENVS 485 Environmental Internship

Syllabus

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**Course description:** The internship experience in the Environmental Science and Studies (ENVS) program is both an academic and a professional experience. Students work a minimum of 120 hours as a member of the environmental community. As a final product, students will complete several writing assignments related to their internship experience. The completed assignments should reflect the student’s internship experience but placed strongly in the context of the overall environmental issue addressed. The curriculum of the ENVS program is within the disciplines that underlie current environmental issues, problems, and programs – completing assignments should reflect this interdisciplinary approach.

**Course prerequisites:** Students must have junior or senior standing, have declared ENVS as their major, have completed most of the program's curriculum, and have a minimum GPA of 2.5. All students must have identified and been accepted into an appropriate internship opportunity prior to registering for the course. Additionally, the internship should be completed before the semester in which you are enrolled in ENVS 485. **Note, the internship coordinator, presently Dr. Chris Salice, must approve each student’s proposed internship.** Students can only register for ENVS 485 by obtaining permission to do so from the Internship Coordinator.

**Course requirements:**  To receive credit for this course students must 1) complete a minimum of 120 hours of work, 2) have their supervisor submit evaluation forms and 3) successfully complete the course assignments. Students must remember that ENVS 485 is a requirement for the major and any grade below a C will not count for the major. In addition, the work must be considered satisfactory by the supervisor and supervisor evaluations will contribute to the final grade.

**IMPORTANT DUE DATES**

|  |  |  |
| --- | --- | --- |
| **Assignment** | **Date** | **Grade Contribution** |
| Supervisor Evaluation Forms | ASAP!! | 40% |
| Complete Questionnaire on Blackboard | 3-4 weeks into semester | 5% |
| Informational Abstract/Executive Summary | ~6 weeks into semester | 10% |
| Literature Review and Summarize one paper | ~8 weeks into semester | 20% |
| Final Paper (final, 5-10 pages total)  **First draft submitted by** ~10-11 weeks into semester and then have option to submit a final, revised draft. | ~13-14 weeks into semester | 25% |

**POLICY ON LATE ASSIGNMENTS:** 5% of the grade for that assignment will be deducted for each day the assignment is late. You will find that in the professional world, lateness is not tolerated.

**Informational Abstract/Executive Summary:** The first assignment is designed to help you succinctly summarize the point of your internship experience. This is not a paragraph about “what you did on your internship”. Instead, the paragraph should inform the reader as to the environmental problem being addressed by your internship organization, how they addressed it and the overall impact of these efforts towards solving the environmental problem they are focused on. The paragraph should be about 500 words and you can think of it more as an abstract or executive summary. Read abstracts from a variety of papers from the literature to get a sense of what this should look like.

**Literature Review and Summary of 1 Paper:** You are to find **10 papers** from the *primary literature* pertinent to your internship experience and/or the goals of the organization you interned with. This means peer-reviewed literature or the gray literature (e.g., government reports). Create a reference list of these papers and submit this along with a summary of one paper that you think is especially important or critical to your internship. You must include either a figure from the paper or generate a figure and describe what it is showing and how it is related to the internship experience. This assignment can be used in the final paper.

**Final Paper ( at least 5 pages text):** The development of the internship paper is the final element that makes the internship a capstone experience for your academic program. This is an opportunity to develop and demonstrate your ability to find, use and integrate information to clearly articulate what you did during your internship…and why it matters. The final analytical paper should be a minimum of 5 pages (no more than 10), double-spaced [excluding the reference list and any figures]. The final paper is expected to be professionally written and will be graded accordingly. Citation methods should be consistent with what is provided below. Note, YOU CAN ASK ME TO REVIEW A DRAFT OF THE PAPER, which I recommend!

**Your target audience for the final paper:** The audience you are addressing in your paper should be assumed to be intelligent, broadly trained individuals like yourself but who do not have the specific experience/training/insight that you gained during your internship. You **cannot** assume they have the specialized training one would obtain in your specific track or that you received during your internship. It is incumbent on you to provide the information your audience needs to understand what you did during your internship and *why it is or was important*. Students are encouraged to seek regular feedback from the internship coordinator but the dates for intermittent products (outline, draft) are provided to avoid last minute efforts. It may be helpful to think of the audience as a state or government agency that you are reporting to.

**\*\*\*\*\*THIS NEXT PART IS CRITICAL FOR A SUCCESSFUL PAPER!**

**The purpose of your final product:** The goal of the paper is to have you place the work/program/problem which was the basis for your internship into the broader context of environmental science and studies. ***It is NOT JUST a description of what you did!!*** One might define “broader context” as the underlying problems that the organization, agency, project, etc., is addressing, the reasons that those problems exist, why it is important that the problems be addressed, etc. If you are seeking an example of this, read any well-cited paper from the primary literature and they almost always provide an excellent introduction and context for the research and then explain their results in the larger context of what else has been done and…what it all means.

Below are some examples of what the "broader context" could be for hypothetical internships. All internships have a variety of potential “broader context” issues and students are expected to explore various ideas they could develop before they decide on their topic.

The broader context of an internship in environmental conservation might be 1) an assessment of the ethics and/or economics and/or genetics of captive breeding programs, or 2) a discussion of medicinal plants, development of pharmaceuticals, and "ownership" of the pharmaceutical patents developed from resources obtained in a "third world country," 3) an analysis of the economic development programs that trade debt for land conservation in developing countries, or 4) the challenges that conservation organizations face raising money or gaining the public’s support.

The broader context for a project in chemical analysis of drinking water could include 1) regulations that govern water quality and a comparison of standards among different jurisdictions (states, nations, communities, etc.), the scientific basis of the standards and their potential impact on citizen health, or 2) the impact (ecological, hydrological, chemical) of different types of development or land uses on water quality and the efficacy of regulations that attempt to minimize these impacts.

The broader context for a project in stream restoration could be whether the techniques used in stream restoration can return the restored stream to a desirable condition in terms of its ecological, hydrological function and how we might know whether the restoration “worked.” A project on stream monitoring could explore the underlying assumptions of the assessment metrics, the value of assessing streams facing different challenges, or the policy implications of various scores as well as the Federal Clean Water Act regulations.

In each of these examples, the specific internship is placed into a broader context. The specific context selected is up to the student and should reflect their interest. Each final paper should consist predominately [~85%] a presentation/discussion of the issue. At the very the end for a student should to reflect on ‘what they think’ about this issue. Thinking about the ‘broader context” forces each student to look "critically" at their specific project and consider such things as "does it work?" in terms of the declared goals of the organization, "is it worth it?" in terms of the economic constraints and difficult choices agencies must make, "does it matter?" in terms of the ecological/hydrological/chemical/socioeconomic function of the area before and after intervention, "what is ethically right" in terms resources belonging to others, or are these activities meeting the ‘letter of the law’ but not the ‘spirit of the law.’ The goal is not to find fault (critically does not mean finding errors), but to see how their work activity "fits" overall in the big picture. Students are expected to discuss their outlines with the internship before submitting their drafts.

Possible organization of the paper: Students are free to develop their papers as they see fit but the general model of organization that follows might be helpful (see outline doc for more). Each section would be well developed as is appropriate to the topics, the internship, and the student’s interests.

Model 1: [focus on the issue]

1. Introduction:
   1. What is the problem/issue and why is it a problem (prairie restoration, stormwater runoff, nutrient pollution, land use)
   2. What is being done to address the issue
   3. What does the organization you interned “fit in” with regard to the overall problem you are discussing?
2. Methods/Approach/Implementation (or similar):
   1. What specifically, was done (or is done by the organization) to address the environmental issue?
3. Results and Conclusion:
   1. What was or is the outcome of the organization’s efforts?
   2. Is it successful? How do you know?
   3. What could be improved?
   4. Why or why was it not a good internship experience (1 and only 1 paragraph!)
   5. Overall concluding paragraph

Cheating or plagiarism in any of the assignments will not be tolerated and will result in a grade of F. The Towson University Code of Conduct prohibits “all forms of dishonesty, including cheating (and) plagiarism.” Plagiarism is the unacknowledged use of another's words or ideas. The most flagrant type of plagiarism is turning in someone else's work as one's own. But plagiarism also includes borrowing another author's ideas, as part of an argument you are developing in your written work, without documenting the source properly. The material presented in the internship paper should be well documented or clearly that of the author. Plagiarism will result in a failing grade for the course. Students failing this course will not be permitted to graduate from this program.

**Evaluation by your site supervisor:** Attached to this document are interim and final evaluation forms. Since students complete their internships at different times, it is **your** responsibility to give these forms to your internship supervisor and remind them when these should be completed and emailed or snail mailed to Towson. The interim evaluation should be completed when you have finished about 40 hours of work. The final evaluation should be sent after you have completed your 120 hours.

**Format for references:**

In text: (author, date) -- if multiple (>2) authors: (Author, et al., date).

In Reference list:

Author Last Name, Initials, Author last name, initials, etc. DATE. TITLE. Journal vol. (issue):pages

Examples:

In text: (Salice, 2012); (Weir, et al., 2016)

In Reference list:

Salice, C.J. 2012. Multiple stressors and amphibians: contributions of adverse health effects and altered hydroperiod to population decline and extinction. *Journal of Herpetology* 46(6):675-681.

Weir, S.M., Knox, A., Talent, L.G., Anderson, T.A., and Salice, C.J. 2016. Direct and indirect effects of petroleum production activities on the Western fence lizard (*Sceloporus occidentalis*) as a surrogate for the dunes sagebrush lizard (*Sceloporus arenicolus*). *Environmental Toxicology and Chemistry* 35(5):1276-1283.

**Notes on Obtaining an Internship**

**Obtaining an internship**: Students are responsible for locating an acceptable internship. Efforts are made to assist students to identify potential opportunities. Information about potential organizations for internships can be found at <http://www.towson.edu/ess/internships_jobs.asp> or at the on-campus career office. Many businesses are open to students calling and asking for learning opportunities. Students are not assigned internships and should approach their potential supervisor as if they were applying for a paid position. It is the student's responsibility to find and be accepted for an appropriate opportunity. An acceptable opportunity is one that involves activity appropriate for a beginning environmental professional (internships that involve primarily clerical work, reception, data entry, etc. are usually not acceptable). Initial discussions with the potential supervisor should help the student determine the type of work experience they will have and the types of professional projects in which they will be involved. Once the student and their potential supervisor agree to the internship, the student needs to obtain the approval of the internship coordinator.

**Obtaining approval from the Internship Coordinator**: To obtain approval, **each student needs to write** and submit to the Internship Coordinator a brief description of their internship plans which includes the following:

* a description and/or identification of the organization for which they will be working,
* information about the organization they will be working for, i.e., what the organization does
* the name, position, title and phone number of their immediate supervisor,
* a description of the projects or activities they expect they will be involved in during their 120 hours of professional work,
* information about the semester in which they plan to enroll in the course.

**Special Note:** *The information requested is to be written by the student --it is not to be written by the supervisor.* Once the Internship Coordinator has a conversation with the internship supervisor that confirms that the experience is academically and professionally valuable for the student, the student will be allowed to register for the class. Typically, students register for the course in the semester AFTER completing the internship experience. For example, if a student completes the experience in the summer, they would take ENVS 485 in the fall.

Interim Intern Evaluation Form

Please email this form to the internship coordinator (Dr. Chris Salice, csalice@towson.edu) after your intern has completed at least 40 hours of work. [Please do not give this form to the intern.]

Student:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

This student has completed approximately \_\_\_\_\_\_\_\_\_\_hours as of this date \_\_\_\_\_\_\_\_\_\_\_\_\_\_.

This student has *discussed/not discussed* their goals for their internship with me. [please circle one]

This student's overall performance has been:

\_\_\_\_ excellent

\_\_\_\_ good

\_\_\_\_ fair

\_\_\_\_ poor

Comments:

Signature (can be typed in):

Thank you for taking the time to complete this form

and for agreeing to work with this Towson student.

**Student Intern Evaluation Form**

Please email this form to Dr. Chris Salice, [csalice@towson.edu](mailto:csalice@towson.edu) [Please do not give this form to the intern]

Please rate \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_'s performance in this internship on the following skills using the scale of 1 to 5 with a **5** indicating **excellent** performance, a **1** indicating **very poor** performance and **NA** indicated for **not applicable**.

|  |  |  |  |
| --- | --- | --- | --- |
| characteristic | score | characteristic | score |
| attendance | \_\_\_\_ | innovation | \_\_\_\_ |
| punctuality | \_\_\_\_ | verbal communication skills | \_\_\_\_ |
| appropriate attire | \_\_\_\_ | written communication skills | \_\_\_\_ |
| attitude | \_\_\_\_ | listening skills | \_\_\_\_ |
| interest | \_\_\_\_ | ability to learn new skills | \_\_\_\_ |
| creativity | \_\_\_\_ | basic knowledge of the field | \_\_\_\_ |
| initiative | \_\_\_\_ | professional growth during internship | \_\_\_\_ |

How many hours has the student completed in their internship with you? \_\_\_\_\_hours.

How well did the student live up to your expectations?

\_\_\_\_ did not meet expectations

\_\_\_\_ met expectations

\_\_\_\_ exceeded expectations

In what ways did the student not meet, meet or exceed your expectations?

How well prepared was this student for the tasks associated with this internship?

Is there additional information you wish to share?

Signature (can be typed in):

Thank you again for working with this Towson University student!