# Term Project Guidelines

MSWI-270C (Ecology, Environment, & the Anthropocene) - Spring 2025



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The *Term Project* in this course is designed to empower you to conduct research into a specific area of ecology and/or environmental science and to incorporate what you have discovered through your research into a creative work.

In order to meet the requirements for a writing intensive course, the writing for this project must produce at least 3000 words in total.

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## Term Project Goals

The Term Project will be driven by the following goals:

# 1. Identify at least three key scientific concepts related to the class that you find interesting or inspiring.

- a. Feel free to do research on a topic of interest and contact your instructor to discuss your ideas and plans. You should not restrict yourself to topics or concepts that we have covered in detail in the class, but <u>your focus must relate to ecology and/or environmental</u> <u>science</u>.
- b. This project is designed to allow you to become more knowledgeable about a subject that you are interested in. It is recommended that you carefully choose the subject matter that will become the focus of your project. While your subject must relate to the course content, a great diversity of topics could satisfy the requirements of this project.
- c. Identify sources you can use to inform your *Term Project*. Using search resources in the library and on the web, identify a diversity of sources that provide relevant information about your chosen subject. There is no particular number of sources that each *Term Project* should curate; based on your project focus, you should obtain enough sources to fully inform your project. Please contact your instructor if you are unsure about the validity of sources you have uncovered, particularly if they come from websites (as opposed to journal articles or books).
- d. Create an *Annotated Bibliography* that fully cites all of your sources and briefly describes the factual and conceptual information provided by each source.
- e. Generate a clear list of at least <u>three key scientific concepts</u> that you will make the focus of your *Term Project*.

# 2. Develop a proposal for using a creative medium to incorporate the scientific concepts uncovered in your research.

- a. Through the development and presentation of a formal proposal, you will identify particular scientific ideas related to your chosen topic that will be incorporated into your creative work. While it is fine to have a particular medium (or even ideas for how to use that medium) in mind, the major focus of the proposal is to decide what ideas, concepts, and information will inspire your creative work. You should also identify the intended audience for your work.
- b. You will produce a draft version of your Proposal that will be revised based on feedback from your classmates and your instructor.

#### 3. Produce a creative work that incorporates your three key scientific concept(s).

a. Although your work will be judged on how well it incorporates all three scientific ideas/concepts, it need not do so in a directly illustrative manner. Feel free to allow your creative work to be as abstract as you deem necessary, but make sure that you are

- prepared to explain in your *Project Summary* how you abstracted the ideas/concepts that form the basis of your project.
- b. This assignment is intended to complement your major studies, so any media that you might employ for other classes is fair game: digital art, websites, flash, animation, jewelry, an advertisement, sculpture, film, short stories, poems, graphic design, critical analysis, photography, painting, fashion design, architectural design, prints, 'zines, interior design, illustrations, or industrial design.
- c. The best possible outcome for this project would be its incorporation into your portfolio.
- d. While you will need to submit your work to your instructor, any analog work will be returned to you before the end of the semester.
- 4. Describe in a *Project Summary* your goals and motivations in producing your work.
  - a. This summary should express to your audience the key scientific concepts from the class that you were inspired by, how you incorporated these concepts, your creative motivations, and your goals in producing this object.
  - b. The summary must include an informative discussion of the science underlying your project.
  - c. It should be clear from reading your *Project Summary* how each source listed in your *Annotated Bibliography* (see below) contributed to your work. (In other words, you should cite all sources of information, both factual and conceptual).
- Engage the class in a discussion of how you used creative/design elements to depict important ideas/concepts related to the evolution of sexual and/or reproductive characteristics.
  - a. Each student will be assigned a slot in which they can present their Term Project.
  - b. You should present the actual work and be ready to:
    - explain the intellectual/creative process that resulted in your completed work;
       and/or
    - ii. answer questions from classmates.

## Term Project Learning Outcomes

Upon completion of their Term Project each student will demonstrate the ability to:

- A. Explore different potential topics in ecology and/or environmental science, using research, your interests, and what you value to guide your choice of a focal topic.
- B. Assess what scientific information is needed to understand and explain your topic, and perform research to find credible sources of all the information your project requires.
- C. Write and refine a proposal that provides the scientific background needed to understand your topic, identifying at least three key scientific concepts that you plan to incorporate into a creative work.
- D. Plan and create a work that incorporates your three key scientific concepts.
- E. Present your creative work to the class, explaining the science behind your work and how you incorporated your key scientific concepts into the work.

## **Preparation Process**

During Weeks 02-13 of this course, we will be incrementally developing your *Term Project* through activities taking place in and outside of class. Below is a summary of the activities that will happen during each week:

Week	In-class work	To be prepared for the following week
01	Brief introduction to the goals of the Term Project	No term project work after class for this week
02	Detailed introduction to the <i>Term Project</i> (and TP Guidelines) <b>Workshop 1</b> (Student Values Assessment)	Initiate literature research process <b>Complete</b> Term Project Topic Visioning Board
03	<b>Workshop 2</b> (Term Project Topic Visioning Board)	Continue literature research process  Add to Annotated Bibliography in your Term Project Written Work document
04	No term project work in class for this week	Continue literature research process (continued)  Add to Annotated Bibliography in your Term Project Written Work document (continued)
05	No term project work in class for this week	Complete Annotated Bibliography in your Term Project Written Work document  Work on Term Project Proposal in your Term Project Written Work document
06	No term project work in class for this week	Complete Scientific Concept List  Work on Term Project Proposal in your Term Project Written Work document (continued)

07	No term project work in class for this week	Complete Draft Term Project Proposal in your Term Project Written Work document
08	<b>Workshop 3</b> (Term Project Proposals)	Work on Term Project Proposal revisions  Complete Term Project Ideation Board
09	<b>Workshop 4</b> (Term Project Ideation Board)	Complete Term Project Proposal (upload to Canvas as a PDF)
		Work on Term Project Sketch
10	No term project work in class for this week	Complete Term Project Sketch  Work on Draft Term Project Summary in your Term Project Written Work document
11	<b>Workshop 5</b> (Term Project Sketch)	Complete Draft Term Project Summary in your Term Project Written Work document Work on Final Term Project
12	<b>Workshop 6</b> (Draft Term Project Summary)	Work on Final Term Project (continued)
13	Final Term Project Check-In	Complete Term Project & Summary (upload to Canvas as a PDF) Work on Term Project Presentation Reading of classmates' Term Project Summaries
14	Term Project presentations	Reading of classmates' Term Project Summaries
15	Term Project presentations	None

Please make sure that you take full advantage of the preparation process by coming to class with the next stage of your *Term Project* each week.

### Intermediate stages

This course is designed to support your development of the *Term Project* through a series of intermediate stages. These stages are outlined below.

#### Annotated Bibliography

As you work to identify a focal area for your research, you will keep an *Annotated Bibliography* of all relevant sources you have discovered. For each source, provide:

- 1. A complete citation using the standard format of your choice (but stick with one format!);
- 2. A bulleted list that lists the factual and conceptual information that you plan to use from this source.

Your instructor will provide you with a Google doc where all of the written components of your project will be developed, including the *Annotated Bibliography*.

#### **Topic Visioning Board**

For Week 03 of class you will compose a *Term Project Visioning Board*. This *Visioning Board* should accomplish the following goals:

- 1. Depict at least three distinct and different directions that you might take for the Term Project.
- 2. For each direction use a combination of words and images to give a sense of what you might explore in this topic, including what scientific concepts might be involved.
- 3. Report on any relevant information related to each of these topics that you have discovered so far.

The best way to explore potential topics is to do a little initial research. Finding sources of any kind that lead you towards what you find interesting will eventually lead you to the more serious scientific literature research required by this project (which we will get to next week!). Add any valuable sources you find to your *Annotated Bibliography* in your *Term Project Written Work* document.

As you compose your *Visioning Board*, it is highly recommended that you look at the class MIRO board where you made an initial reflection on your values and interests. Look for topics that might allow you to pursue both what you care about (your values) and what you will find enjoyable (your interests). Motivation often arises from that combination of care and enjoyment!

You can compose this board using any means you wish, but it should be a single 2D board that you can share in class, either in analog form or using one of our shared class monitors to project your device

screen. We want to be able to compare all of your possible directions on one board, so please <u>no</u> slideshows!

#### Annotated Bibliography Assessment

Following Week 05 of class your instructor will perform an assessment of your *Annotated Bibliography* as developed thus far. You don't need to prepare to do anything beyond preparing your *Annotated Bibliography* in your *Term Project Written Work* document.

### Scientific Concept List

Following Week 06 of class you will compose a list of scientific concepts that you plan to focus on for your project. This list of concepts goes in your *Term Project Written Work* document.

For each of your three key scientific concepts, you should provide this information in the table provided in the *Term Project Written Work* document:

- List the scientific question that this concept answers.
  - This question should ask a how and/or why question (for example: how something works, why something happens, why something exists, how different things are related to each other)
- List the scientific concept
  - This concept should be listed as a complete sentence that answers your how and/or why question.
- List short citations that link to your *Annotated Bibliography* for sources that provide information on this concept.

#### **Proposal**

During Week 05-09 you will develop a proposal for your project that identifies and explains:

- A. what subject matter your project will focus on;
- B. what you have learned through research about this subject matter;
- C. what three scientific concepts you would like to incorporate into a creative project; and
- D. how you imagine you might incorporate scientific concepts into your creative work, who you envision as your potential audience, and what forms the creative work might take (please propose at least two different directions for your creative work).

All of these elements of the proposal should be supported by research, using the *Annotated Bibliography* to cite all sources and list the information they provided.

Proposals will be developed through a series of iterations, including feedback from your peers and your instructor that should lead you to make critical revisions. We will devote the entirety of Week 08 to workshopping your Term Project Proposal; you should have a complete draft of your proposal composed in your *Term Project Written Work* document for the Week 08 class meeting.

To meet the requirements of a writing intensive course, this proposal <u>must be at least 2000 words in length</u>.

#### **Project Ideation Board**

For Week 09, you will ideate to establish at least three potential directions that your creative work could take. You should build on the initial ideas that you put forth in your proposal to describe in as much detail as possible each of the three potential directions for your creative work. Try to create distinct possibilities (in other words, make them sufficiently different from each other) and to show what would be involved in each work in as much detail as possible.

You can compose this board using any means you wish, but it should be a single 2D board that you can share in class, either in analog form or using one of our shared class monitors to project your device screen. We want to be able to compare your different creative work possibilities on one board, so please no slideshows!

#### **Project Sketch**

Before creating your actual creative work, you will get a chance to get feedback on a "sketch" of your plan. As the name suggests, the sketch should be an initial depiction of your proposed creative work. What constitutes a "sketch" will vary based on the kind of work you plan to do, but all sketches should include:

- a description of what medium or media you plan to use to create your work;
- a <u>clear and specific</u> plan for what you are going to be creating; and
- an explanation of how the work will incorporate the three scientific concepts identified in your Term Project Proposal.

The final form of your creative work need not be fully realized, but the general nature of what you will create for the project itself should be clear in the sketch. An ideal sketch has the full outline (visual and/or text) of what you plan to do *before* you actually flesh out the final project. The goal of completing the sketch is to get feedback from your peers and instructors on your planned work before you take the time needed to implement it.

Feel free to discuss with your instructor what form your "sketch" should take.

#### **Project Summary**

Your project (as a "creative work") will be accompanied by a *Term Project Summary* that includes the *Annotated Bibliography*. The *Term Project Summary* should:

- provide general scientific background required to understand the project;
- describe and explain the scientific concepts that were incorporated into the project, using citations to indicate which sources provided particular content;

- discuss how particular creative methods were used to incorporate scientific concepts into the work; and
- identify the intended audience for the work and explain the impact that the work is designed to have on that audience.

Each *Term Project Summary* should also include a Bibliography that provides a complete citation for each source. Please make sure that each of your sources is cited inline within the text of your *Term Project Summary* at least once.

To meet the requirements of a writing intensive course, this summary <u>must be at least 1000 words in</u> length.

#### The Project

Your actual term project should be a creative work that incorporates the three scientific concepts that you uncovered in your research.

All Term Projects must be submitted via Canvas as follows:

- If your project is purely digital, it can be directly uploaded to *Canvas*. Some movie projects may exceed the *Canvas* upload limit, and should be uploaded to a film-streaming site such as YouTube or Vimeo (please provide the URL on *Canvas*).
- If your project is analog, you should upload a set of at least six (6) portfolio-quality images of your work to the LMS as a single PDF file.

## Feedback as you develop your project

Throughout this project you will be receiving feedback from both your peers and your instructor on the intermediate stages of your project. A big part of the learning experience for this project is engaging with that feedback: making sure you understand what others are reflecting to you, contemplating how that feedback relates to your creative goals, and deciding on how (and if/when) to revise your work in response to this feedback.

You will also be asked to give quality, constructive feedback to your classmates throughout this process (and can earn points towards the *Collaboration and Feedback* component of your grade based on the quality of your feedback). Remember that quality feedback is actionable. If you are telling a classmate that you like something they did, they need to hear why you like that element of their work so they can make sure to retain the best elements of their project. If you are telling a classmate that something needs to improve, you need to explain both why an element of their project is not working for you and what direction you think they should move in to make improvements.

## **Delivery of Materials**

The written components of the *Term Project (Project Summary + Annotated Bibliography)* will be developed in a Google doc generated by your instructor. Developing the written components of the project via a Google doc will allow you to receive feedback from your peers and instructor directly on your work, streamlining the revision process. Please see the *Term Project* section of *Canvas* (in the "General Course Resources" module) to access the Google doc where you will develop the written components of your *Term Project*.

Although the *Term Project Written Work* document is a great place to develop your writing, all written work for the project should be outputted as a "clean" PDF containing your finalized *Project Summary* and *Annotated Bibliography*.

The components of your project that relate to the development of your creative work can be provided in a variety of formats (as appropriate), but for 2D work a PDF (rather than a series of image files) is required. Please see the *Canvas* for details on how to submit the intermediate and final components of your *Term Project*.

## Scheduling

All completed student projects are due at the end of instructional Week 13. See the course Canvas site for specific due dates.

You will be scheduled to present during either Week 14 or Week 15. Again, please see the course Canvas site to see when you are scheduled to present.

## Term Project Presentation

During Weeks 14-15 of the course, students will present their *Term Projects* and get the chance to provide each other with feedback. Each presentation should:

- 1. provide general scientific background required to understand the project;
- 2. describe and explain the scientific concepts that were incorporated into the project;
- 3. discuss how particular creative methods were used to incorporate scientific concepts into the work; and
- 4. identify the intended audience for the work and explain the impact that the work is designed to have on that audience.

## On academic honesty

Plagiarism of any kind will not be tolerated. All cases of suspected plagiarism will be turned over to the Registrar's office for potential referral to the academic judiciary. Please be careful to indicate the source

of all ideas other than your own; this includes both direct quotes ("evolution is the science of...") and paraphrasing of books, scientific papers, and websites. Careful citation makes you seem more authoritative in whatever you write. For more information on the course plagiarism policy see the syllabus and this site: For Students | Christopher X J. Jensen.

### Help!

You are not meant to be left alone to develop your *Term Project*. Please take advantage of the built-in peer and instructor feedback that will occur during Weeks 02-13. Also, please reach out to your instructor at any time if you need help. The best *Term Projects* will emerge from a lot of conversations that you have with your classmates, instructor, and perhaps other trusted colleagues.