

Environmental Science Degree Program Capstone Research Experience (EVS 271 & EVS 371)



Student Name: _____ Mentor Name:¹ _____
Student EID: _____ Mentor Depart: _____
Student Email: _____ Mentor Email: _____
Capstone Semesters: _____ Mentor Phone: _____

(Ex: Fall 2016 & Spring 2017)

INSTRUCTIONS: All students pursuing the EVS Capstone Research Experience must enroll in and complete two semesters of an independent research project in sequential terms under the mentorship of a research scientist - usually, a UT Austin faculty member. The expected capstone coursework is **EVS 271 (1st semester)** and **EVS 371 (2nd semester)**. Separate requirements will be established (see following) and separate grades will be issued by the Research Mentor for each course.

Prior to the beginning of the 1st semester of the Capstone Experience, the student and Research Mentor must complete this Capstone Research Experience Contract and **return a signed original** to the EVS Program Office **along with a short, 200-word preliminary description of the project**. At the conclusion of EVS 271, the student and Research Mentor must meet to review and confirm or revise the contract requirements for EVS 371, and reaffirm the agreement. The student must then provide a copy of the reaffirmed contract to the EVS Program Office.

TITLE OF PROPOSED PROJECT: _____

STUDENT REQUIREMENTS: The student is responsible for the following (student, please initial each line):

- _____ • Submitting a completed, signed contract and 200-word description of the project to the EVS Program Office in accordance with established deadlines, and maintaining copies of all documentation pertinent to registration for EVS 271 and EVS 371.
- _____ • Meeting with the Research Mentor in person periodically throughout the semester, maintaining regular contact by phone or email, and promptly reporting any academic or logistical concerns.
- _____ • Completing course requirements as described on the following pages in a timely manner, and following The University of Texas at Austin *Honor Code* and *Standard of Academic Integrity* at all times.
- _____ • Submitting a mentor-approved copy of the Final Report (EVS 371) to the EVS Program Office in accordance with established deadlines.
- _____ • Providing a copy of all data and results collected to the Research Mentor at the conclusion of the Capstone Research Experience.
- _____ • Presenting the resulting research during EVS 151 Professional Development Seminar, or another scientific presentation context identified under advisement from the Research Mentor. **If you plan to present somewhere other than EVS 151, please specify below:**

MENTOR RESPONSIBILITIES: The Research Mentor is responsible for the following (Research Mentor, please initial each line):

- _____ • Ensuring that the student has substantial input into the selection of the research question and into the design and development of the research project, while also determining that the project is reasonably likely to be feasible and that the student will probably be able to gain access to training, research facilities, equipment, etc. essential to the project.
- _____ • Meeting with the student in person periodically throughout the semester, maintaining regular contact by phone or email, and being generally available to the student in the event they need guidance on how to proceed.
- _____ • Determining and reporting the final grade as specified for both semesters (see next page) and in accordance with the academic calendar.

¹ While the Research Mentor is typically a faculty member at The University of Texas at Austin, students working with non-faculty research scientists will need to have their capstone plan made and approved by their track faculty advisor ahead of time in order to appoint an instructor of record on campus to enter final grades.

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Capstone Research Experience Instructions



1. Submission of Research Description and Contract

On or by 12:00 p.m. on the fourth day of class in which the student is registered EVS 271, the student shall turn in the Contract on the opposite side of these instructions (complete with the signature of his or her Research Mentor and Faculty Advisor) and submit it along with a brief description (200 words) of the project to the EVS Program Office. Failure to do so will result in the student being dropped from EVS 271 for the semester.

2. Role of the Faculty Advisor

The Contract will be reviewed by the Faculty Advisor for the student's degree track. In the event a Research Mentor is not appointed as faculty by UT Austin, the Faculty Advisor will serve as the "Mentor of Record" for the student and will be responsible for entering in the final grade, as determined by the Research Mentor. In the event the proposed research is not within the scope or spirit of the Capstone Research Experience requirement, the Faculty Advisor will work with the student and his/her Research Mentor to modify the scope or nature of the research experience.

3. Independent Inquiry (II) Flag

EVS 371 carries the Independent Inquiry flag. Independent Inquiry courses are designed to engage you in the process of inquiry over the course of a semester, providing you with the opportunity for independent investigation of a question, problem, or project related to your major. You should therefore expect a substantial portion of your grade to come from the independent investigation and presentation of your own work.

4. Default Requirements

The details (including the due dates) for EVS 271 and EVS 371 are ultimately up to the student and Research Mentor to negotiate. Style guides for each assignment should be determined between the student and Research Mentor, taking into consideration any standards specific to the academic field related to the research project.

The following requirements are generally expected of students, unless otherwise specified by the Research Mentor:

1st Semester (EVS 271):

The **Research Proposal** should be approximately 500 words and should include: (1) a brief outline of the problem under analysis (including at least 3 references to scientific publications), (2) the research hypothesis, (3) proposed methodology, and (4) expected outcomes.

The **End of Semester Report** should be no less than five pages, and should include: (1) a detailed description of techniques learned, (2) data collected, and (3) any preliminary results available.

2nd Semester (EVS 371):

The **Mid-Term Report** should be no less than five pages, and should include: (1) a thesis statement/ hypothesis; (2) discussion of the problem under analysis; (3) methodology; and (4) expected outcomes.

The **Research Presentation** should involve the preparation of materials suitable for communicating the research project in scientific communities. Most students will satisfy this requirement by taking EVS 151 (Environmental Science Professionalism II: Communicating Science). Students may also choose to work with their mentor to present at campus poster sessions, scientific meetings or conferences, or other research settings and specify the plan to present on the front page of the contract. If a poster is completed, the following sections are recommended: (1) abstract; (2) introduction; (3) materials & methods; (4) results to date; (5) discussion / conclusions; and (6) acknowledgements & references.

The **Final Report** should be no less than 15 pages (exclusive of references, figures, and data tables) and should include: (1) an abstract, (2) introduction, including hypothesis, (3) methods, (4) results, (5) discussion, and (6) conclusions.

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5. Default Deadlines

In the absence of an agreement to the contrary, the requirements listed above should be completed in accordance with the following schedule. Mentor-approved copies of the **Final Report** should be submitted electronically to the EVS Program at the conclusion of the 2nd semester.

1st Semester (EVS 271):

	Research Description & Contract	Research Proposal	End of Semester Report
Fall Term Due Dates	4 th day of class by noon	October 1 (or next business day)	Last day of class
Spring Term Due Dates	4 th day of class by noon	March 1 (or next business day)	Last day of class

2nd Semester (EVS 371):

	Reaffirmed Contract	Mid-Term Report	Research Presentation	Final Report
Fall Term Due Dates	4 th day of class by noon	October 1 (or next business day)	To be arranged w/Mentor	Last day of class
Spring Term Due Dates	4 th day of class by noon	March 1 (or next business day)	To be arranged w/Mentor	Last day of class