

# THESIS PROPOSAL, AGREEMENT, AND TIMELINE TEMPLATE

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The Thesis Proposal, Agreement, & Timeline, signed and approved by your mentor, should be submitted to the HC via [webform](#). This template offers a guide of what should be included.

## TITLE

A short, descriptive title of your proposed thesis project – no need to be clever.

## YOUR NAME

## INTRODUCTION

A brief introductory statement of intent that explains your project and its goals to a general, educated reader (imagine your audience being other HC students). This should be a general description of your thesis providing the contextualization necessary to explain why this topic is important and its larger implications for your discipline.

## THESIS STATEMENT /HYPOTHESIS

A one-sentence statement of your thesis that sets the parameters of your project. This statement can take many different forms, depending on the discipline of your project: it might be a hypothesis, a research question, or goal statement. In all forms, the thesis statement should define a boundary for your thesis that clearly and simply states your overarching goal.

## APPROACH/METHODOLOGY

How do you plan to complete your project? In this section, describe the approach you will take in completing your thesis research and analysis. What methods and materials will you use? How or where will you collect and analyze data? If you are producing a creative work, what themes and genres will it explore and what will your work process be? You might also note here any anticipated difficulties or pitfalls you expect to encounter and how you plan to address these. The content of this section will vary depending on the field of your thesis, so please consult your mentor.

APPROACH SUBSECTION (REQUIRED FOR ALL THESES): Does your thesis project involve any research activity that requires compliance procedures (e.g., human subject research requiring Institutional Review Board approval)? If you are unsure, ask your mentor or consult the OSU [Office of Research Integrity](#).

## EXPECTED RESULTS/ANTICIPATED OUTCOME AND SIGNIFICANCE

Explain here what you expect to produce or learn through your project and what you anticipate your thesis will contribute to your scholarly field. It is also helpful here to set your project goals in a large context of significance.

## SIGNATURE LINE

Mentor: \_\_\_\_\_  
Mentor's Name (typed), (Department) Date

By signing, the mentor gives his/her assurance that they have read the proposal, sees it as a legitimate HC research project, and is willing to serve as your thesis advisor for the proposed project. If this project requires IRB approval, the mentor confirms eligibility as a Principal Investigator according to [IRB criteria](#).

# Honors College Thesis Expectations Agreement

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## Student Responsibilities

- Work \_\_\_\_\_ hours each week per research credit in \_\_\_\_\_ course.  
Students typically work 3-5 hours each week per graded research credit in the discipline of their mentor.  
(i.e. 2 credits of BB 403 is equivalent to 6-10 hours per week)
- Maintain a notebook/journal/lab record to verify accomplishments, protocols, problems, questions, dates and number of hours worked and results.
- Mid-way through the research, student will select committee members (the committee will include the mentor, and two others) to review the thesis. Selection of committee members is in consultation with and approved by the thesis mentor.
- Submit a final draft copy of the thesis to their thesis committee no later than ten business days prior to their scheduled thesis defense date
- Present their thesis in front of their thesis committee, discuss and defend their thesis by answering questions about their research and related topics such as theoretical background, rationale, results, experimental design and overall significance
- Revise, edit, and complete the final thesis and submit to OSU Scholar Archive no later than Friday of week 10 of their graduation term.
- Gather signatures for thesis submission form and submit to the Honors College no later than Friday of week 10 of their graduation term.

Student: \_\_\_\_\_  
Student's Name (typed) Date

By signing, the student gives their assurance that they agree to the 'Student Responsibilities' outlined for the proposed project.

## Mentor Responsibilities

- Provide guidance on the development and direction of the research project. The project, including background reading and real-time research, should take about 18-30 total hours (6 credits at 3-5 hours per credit).
- Explain and demonstrate how records should to be kept, including notebooks or data organization and storage.
- Identify the publishing or style guide to be used for the thesis: \_\_\_\_\_  
o Typical examples are APA, Harvard, IEEE, MLA, etc.
- Recommend a secondary person for the student to utilize in case of questions: \_\_\_\_\_  
Assist in preparing and reviewing:
  - o project timeline
  - o project reference materials
  - o drafts of the written thesis
- Assist in selecting and approving fellow committee members.
- Provide grades for research credits in terms student enrolls.
- Provide guidance as the student designs the poster and prepares for the thesis defense.
- Chair the student's thesis defense.

Mentor: \_\_\_\_\_  
Mentor's Name (typed), (Department) Date

By signing, the mentor gives their assurance that they agree to the 'Mentor Responsibilities' outlined for the proposed project.

# Honors College Thesis Proposed Timeline

General Guidelines: In Stage 4, 1st term - Read & Research / 2nd term -Analyze Results & Write / 3rd term – Edit, Defend & Submit

Suggested Submit Date:		Submit to:
	Read and summarize past literature on topic	
	Gather questions / research / data / themes	
	Analyze thesis questions / data / research / themes	
	Select committee members	
	Write and format thesis	
	Revise thesis draft #1, #2, #3	
	Finalized draft to the thesis committee	
	Schedule the thesis defense	
	Design and print the thesis poster	
	Create a presentation on your project	
	Defend the thesis project	
	Make revisions to the thesis and format it	
	Upload thesis to the OSU Scholars Archive	
	Gather approval signatures	
	Submit the thesis	HC Office

## Response of *Electrophorus electricus* Electric Organ Discharge (EOD) to Captivity in the Pacific Northwest

**Robin J. Cogitare**

### Introduction

The population of *Electrophorus electricus*, commonly known as electric eels, in captivity has been increasing in the past twenty years due to widespread public interest in these enigmatic sea creatures and refinements in artificial environmental technologies. This has provided opportunities for systematic observation and data collection across multiple generations that have revealed unusual responses to captivity. Of particular interest are variable effects on eels' Electric Organ Discharge (EOD), their eponymous ability to generate electric charges, central to both navigation and hunting, which is sustained by electrocytic organs. Anecdotal accounts have long held that captive eels experience some decline in EOD capabilities, and recent research has indicated that eels born in captivity experience increasing EOD deficiencies with each succeeding generation. Moreover, the magnitude of decline appears linked to unknown geographic factors, with eels in the Pacific Northwest especially susceptible to rapid loss in this vital ability.

### THESIS STATEMENT or HYPOTHESIS

We hypothesize that potassium and sodium content in the air and water in Pacific Northwest eel environments is linked to EOD development during eel gestation and that increasing content levels will reduce generational declines. Eels' native environment is high in both of these elements, and evidence indicates that they play a central role in electrocytic action.

### APPROACH or METHODOLOGY

Working in the lab of Dr. Sten Bolt at the Hatfield Marine Science Center, I will establish a control and three closed experimental breeding populations of eels. The control group will be kept in conditions that mirror historical practices. Experimental group A will be placed in water with artificially augmented sodium and potassium levels; group B will experience atmospheric injections of sodium and potassium gas compounds; and in group C eels will be given potassium and sodium supplements orally. We will take regular measurements in all groups of sodium and potassium levels in the water, atmosphere, and eels' blood. We will also regularly measure EOD abilities in eel populations in each group using the well-established Hendricks Measurement scale.

APPROACH SUBSECTION (REQUIRED FOR ALL THESES): Does your thesis project involve any research activity that requires compliance procedures (e.g., human subject research requiring Institutional Review Board approval)? No

### EXPECTED RESULTS and ANTICIPATED OUTCOME AND SIGNIFICANCE

We expect to find that sodium and potassium levels similar to eels' natural habitat will reduce, but not eliminate, the reduction in EOD potential across generations. Our data will have important consequences for both the understanding of eels' electrocytic organ development and for captivity and rehabilitation practices of eel management.

Mentor: \_\_\_\_\_

Sten Bolt, Zoology

Date

By signing, the mentor gives his/her assurance that they have read the proposal, sees it as a legitimate HC research project, and is willing to serve as your thesis advisor for the proposed project. If this project requires IRB approval, the mentor confirms eligibility as a Principal Investigator according to [IRB criteria](#).

# Honors College Thesis Expectations Agreement

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## Student Responsibilities

- Work 3 hours each week per research credit in Z 403 course.
- Maintain a notebook/journal/lab record to verify accomplishments, protocols, problems, questions, dates and number of hours worked and results.
- Mid-way through the research, student will select committee members (the committee will include the mentor, and two others) to review the thesis. Selection of committee members is in consultation with and approved by the thesis mentor.
- Submit a final draft copy of the thesis to their thesis committee no later than ten business days prior to their scheduled thesis defense date
- Present their thesis in front of their thesis committee, discuss and defend their thesis by answering questions about their research and related topics such as theoretical background, rationale, results, experimental design and overall significance
- Revise, edit, and complete the final thesis and submit to OSU Scholar Archive no later than Friday of week 10 of their graduation term.
- Gather signatures for thesis submission form and submit to the Honors College no later than Friday of week 10 of their graduation term.

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

Robin J Cogitare

Date

By signing, the student gives their assurance that they agree to the 'Student Responsibilities' outlined for the proposed project.

## Mentor Responsibilities

- Provide guidance on the development and direction of the research project. The project, including background reading and real-time research, should take about 18-30 total hours (6 credits at 3-5 hours per credit).
- Explain and demonstrate how records should to be kept, including notebooks or data organization and storage.
- Identify the publishing or style guide to be used for the thesis: ESA Style Guide
- Recommend a secondary person for the student to utilize in case of questions: Kelli K.
- Assist in preparing and reviewing:
  - project timeline
  - project reference materials
  - drafts of the written thesis
- Assist in selecting and approving fellow committee members.
- Provide grades for research credits in terms student enrolls.
- Provide guidance as the student designs the poster and prepares for the thesis defense.
- Chair the student's thesis defense.

Mentor: \_\_\_\_\_

Sten Bolt, Zoology

Date

By signing, the mentor gives their assurance that they agree to the 'Mentor Responsibilities' outlined for the proposed project.

## Honors College Thesis Proposed Timeline

General Guidelines: In Stage 4, 1st term - Read & Research / 2nd term -Analyze Results & Write / 3rd term – Edit, Defend & Submit

Suggested Submit Date:		Submit to:
By Oct. 31	Read and summarize past literature on topic	Dr. Bolt
By Jan. 1	Gather questions / research / data / themes	Kelli K.
By Feb. 15	Analyze thesis questions / data / research / themes	Kelli K.
By Feb. 15	Select committee members	Dr. Bolt
By April 15	Write and format thesis	Dr. Bolt
By May 1	Revise thesis draft #1, #2, #3	Kelli K.
By May 5	Finalized draft to the thesis committee	Dr. Bolt
By May 15	Schedule the thesis defense	Robin
By May 10	Design and print the thesis poster	Robin
By May 15	Create a presentation on your project	Robin
By May 25	Defend the thesis project	Robin
By June 1	Make revisions to the thesis and format it	Robin
By June 2	Upload thesis to the OSU Scholars Archive	Robin
By June 2	Gather approval signatures	Robin
By June 5	Submit the thesis	HC Office