

## Guide to Preparation of the Dissertation Proposal Graduate Group in Ecology (GGE)



The goal of the dissertation research proposal is to provide a concrete plan to carry out a project that will result in a substantial and original contribution to the field of Ecology. Students are required to produce a dissertation proposal and have it approved by the dissertation committee within 6 months of passing the qualifying examination. It is advisable for students to begin the process of proposal development as soon as possible following advancement to candidacy, and before they have invested substantial effort into their project, since it is likely that the committee will require changes in experimental design and approach. The format should follow the general format of an NSF grant proposal, and consist of the following sections:

- (1) Specific aims
- (2) Background and significance
- (3) Preliminary studies
- (4) Research design and methods
- (5) References

Sections 1-4 should not exceed 15 single-spaced pages.

### **Guidelines**

**(1) Specific aims.** State briefly the broad, long-term and big-picture objectives of the work. This should be theoretically and conceptually grounded. Then state the specific questions that will be addressed by the proposed research. One page is recommended.

**(2) Background and significance.** Briefly sketch the background to the proposal. Critically evaluate existing knowledge, and identify the gaps that the project is intended to fill. State concisely the importance of the proposed research by relating the specific aims to the broad, long-term objectives. Three to four pages are recommended.

**(3) Preliminary studies.** Describe the work you have already accomplished that is relevant to the proposal. A maximum of two pages is recommended.

**(4) Research design and methods.** Describe in detail the experimental design and the procedures to be used to answer the specific questions addressed by the project aims. Include the means by which data will be collected, analyzed and interpreted. Describe any new methodology and its advantage over existing

methodologies. Discuss the potential difficulties and limitations of the proposed procedures along with alternative approaches to achieve the aims. Provide a tentative sequence and timeline for the investigation. Describe the dissertation chapters and publications expected to emerge from this work. Although no specific number of pages is recommended for this section, the total for sections 1-4 should not exceed 15 pages.

**(5) References.** Each citation must include the names of all authors, title of the article, name of the book or journal, volume number, page numbers and year of publication.

Concepts within the research proposal can be discussed with others (such as the student's major professor and peers), but the writing of the proposal should be solely the student's work, as the proposal will help the student attain proficiency in scientific writing.

All members of the dissertation committee will sign the cover page of the proposal once they have approved its content, and the student shall give a copy to the Ecology Student Coordinator. Failure to submit the dissertation proposal in a timely fashion may result in an 'unsatisfactory' progress report from the GGE Chair.

December 2, 2015

**GRADUATE GROUP IN ECOLOGY**  
**Dissertation Proposal Approval**  
**To Be Submitted Within Six Months of Passing the Qualifying Examination**

The research proposal must also include a 150 word lay summary of the students' actual research project, which will be posted on the GGE website.

Name \_\_\_\_\_ Date \_\_\_\_\_

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**Dissertation Proposal Title:**

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**Dissertation Proposal Abstract:**

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**Signatures:**

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Major Professor  
Dissertation Chair

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Dissertation Member

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Dissertation Member

**Reviewed:**

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**Edwin Grosholz, Ecology Graduate Adviser**