

Missouri S&T Geology and Geophysics Program PhD Dissertation Proposal Guide

Approved by the Program Faculty, 03/23/2007

The Dissertation Proposal Guide (DPG) provides guidance for the preparation of proposals for PhD students in the Geology and Geophysics Program. The DPG is similar in many ways to the “Grant Proposal Guide” of the National Science Foundation. The final version of the proposal must be submitted to the dissertation committee at least two weeks prior to the PhD Qualifying Examination.

It is important that all proposals conform to the instructions provided in the DPG. Proposals that are not consistent with these instructions will be returned to the candidates.

1. *Proposal Margin and Spacing Requirements*

The proposal must be clear, readily legible, and conform to the following four requirements:

- a. The height of the letters must be 11 or 12 point.
- b. Type density, including characters and spaces, must be between 10 and 16 characters per 2.5 cm.
- c. The proposal must have 1.0 or 1.5 line spacing.
- d. Margins, in all directions, must be between 2.5 and 3 cm.

2. *Sections of the Proposal*

A. Cover Page

The first line of the Cover page should be “Geology and Geophysics PhD Dissertation Proposal”. Then the following information must be provided in the order and format specified below:

Title of the proposal; Name of the candidate; date of submission; date of initial admission to the G&G PhD program; and names of the dissertation committee members (indicating major advisor(s)).

B. Project Summary

The proposal must contain a summary of the proposed activity, not more than one page in length. It should not be an abstract of the proposal, but rather a self-contained description of the activity that would result if the proposed research were successfully conducted. The summary should be written in the third person and include a statement of objectives and methods to be employed. It must clearly address in separate statements (within the one-page limit): (1) the intellectual merit of the proposed activity; and (2) the broader impacts resulting from the proposed activity, i.e., the significance of the proposed study in areas outside the candidate’s own discipline of study.

C. Project Description

The Project Description should provide a clear statement of the work to be undertaken and must include: objectives for the period of the proposed work and expected significance, and relation to

the present state of knowledge in the field. It should outline the general plan of work, including the broad design of activities to be undertaken, and, where appropriate, provide a clear description of experimental methods and procedures. Preliminary results should be described in this section. The broader impacts resulting from the proposed activities must be described as an integral part of the narrative.

The Project Description must be paginated as “C-n” where n=1,2,..., and must not exceed 10 pages. Visual materials, including charts, graphs, maps, photographs and other pictorial presentations as well as their captions are included in the 10-page limitation. The visual materials should be clearly legible and embedded in the appropriate places of the text.

D. References Cited

Reference information is required. Each reference must include the names of all authors (in the same sequence in which they appear in the publication), the article and journal title, book title, volume number, page numbers, and year of publication. If the document is available electronically, the Website address also should be identified. There is no established page limitation for the References Cited section. The references must be arranged alphabetically according to the last name of the first author.

This section must be paginated as “D-n” where n=1,2,... .

The following is an example of a valid reference (adapted from the American Geophysical Union Guide to Authors):

Rice, C., G.W. Bush, and H.R. Clinton (2007), Analysis of temperature inversion events in the lower mesosphere, *Journal of Geophysical Research*, 109, D02S07, doi:10.1029/2007JB002268.

E. Biographical Sketch

A biographical sketch (limited to two pages) is required for the candidate.

The Biographical Sketch section must be paginated as “E-n” where n=1,2. The following information must be provided in the order and format specified below:

(i) Professional Preparation

A list of the individual’s educational background as indicated below:

Undergraduate Institution(s)

Major

Degree & Year

Graduate Institution(s)

Major

Degree & Year

(ii) Appointments

A list, in reverse chronological order, of all the individual’s professional appointments, beginning with the most recent/current appointment. Appointment(s) as a graduate teaching/research assistant should also be listed.

(iii) Publications

A list of: (i) up to 5 publications most closely related to the proposed project; and (ii) up to 5 other publications, whether or not related to the proposed project. Each publication identified must include the names of all authors (in the same sequence in which they appear in the publication), the article and journal title, book title, volume number, page numbers, and year of publication. If the document is available electronically, the Website address also should be identified.

For unpublished manuscripts, list only those submitted or accepted for publication (along with most likely date of publication). Conference abstracts can be listed as publications.

(iv) Scholarships and Other Support Received over the Past Three Years

Indicate the name, date, and amount of all the scholarships received over the past three years at Missouri S&T or elsewhere.

(v) Graduate-level courses

Either list the name, grade, and semester/year of all the graduate-level courses taken, or attach a copy of course plan on Form IV.

(vi) Honors and Awards

(vii) Professional Service

List all activities including specific roles, elected positions, or duties performed on committees and events for the department, campus, professional, and/or civic organizations.

F. Facilities, Equipment and Other Available Resources

This section of the proposal is used by the dissertation committee to assess the adequacy of the resources available to perform the effort proposed. The candidate must describe only those resources that are directly applicable and are available to her/him. A rough estimate of the cost of using the resources should also be provided. This section has no page limit, and must be paginated as "F-n" where n=1,2,