

## Missouri S&T Department of Psychological Science Guidelines for Thesis Students

### Overview:

A master's thesis involves conducting an original research project under the guidance and supervision of a thesis advisor. Working with your thesis advisor and committee, you will develop a study proposal, obtain and analyze data, submit a written thesis formatted according to University of Missouri Guidelines (available from the Office of Graduate Studies: <http://grad.mst.edu>), and give an oral defense of your findings. In accordance with University guidelines, you will register for at least 6 credit hours of thesis credit (Psych 6099) with your thesis advisor. These credits may take the place of your two electives in the I-O MS curriculum, but may not be taken in place of core-curriculum courses.

### Expectations:

- You will first identify a thesis advisor (i.e., a graduate faculty member in the Psychological Science Department). You will work with that individual to then identify your thesis committee. Your thesis advisor should be someone who is an expert in the area of focus (or a related-area) for your thesis idea; this person may not necessarily be the academic advisor you were originally assigned upon acceptance into the program.
- IF your thesis advisor is not the same person as your academic advisor, you will need to make the advisor change on your Form 1A the semester before you graduate (i.e., your penultimate semester).
- Your study must be approved by your thesis committee before it may begin. This involves providing your committee with a written proposal and giving a formal proposal presentation in which the committee has the opportunity to ask questions and require revisions to the project. The thesis committee must approve of the project, timeline, and analysis plan before the study may begin. IRB approval must be obtained as needed.
- The written thesis proposal should be formatted according to current APA requirements (including style, structure, and format), and should be free of grammatical and spelling errors.
- Once an approved thesis project has been completed, a formal thesis defense should be scheduled with the committee. The defense will consist of a written thesis as well as a formal presentation in which the thesis committee again has the opportunity to ask questions and require follow-up analyses or other revisions before giving their approval.
- The written proposal/thesis should be given to the committee no less than 2 weeks prior to the proposal/defense meetings.
- The final Master's Thesis should be of a quality that could be submitted for publication in a peer reviewed journal.
- NOTE: A thesis student is not required to obtain statistically significant results from their data analysis. The scientific process is about testing hypotheses rather than confirming preconceived expectations. If the committee has approved the project, and the process has been accurately followed, then the defense meeting should primarily be a discussion and explanation of the findings. Passing or failing a thesis defense is not contingent on the specific results obtained, but rather on having engaged meaningfully and diligently in the scientific process. A thesis committee may submit additional requirements at the defense

if they feel it is necessary for the thesis to meet sufficient standards and quality.

### **MS Proposal Content Guidelines:**

A thesis proposal document should contain, at a minimum, the following sections and information. Proposals that do not meet these expectations, including following APA style and formatting, will be sent back to the student for revisions and the proposal meeting postponed.

#### **Abstract**

Provide a 250 word summary of your project. This should include a brief explanation of the rationale for the proposed project, the proposed study to be conducted, and the scientific contribution the research will make.

#### **Introduction/Literature Review**

A Master's thesis typically requires a more in-depth literature review than is common in a published research article. The literature review should convey the importance and unique aspects of the project. It should outline the contribution of the project to the scientific community. The literature review should be written to be read by scientific professionals that may not be familiar with the specific variables of interest.

#### **Research Question & Hypotheses**

The thesis proposal should include an explicitly stated research question such that the overall purpose of the research can be evaluated. Specific testable hypotheses should be stated and justified based on previous research findings.

#### **Method**

Describe the methodological approach of the proposed research such as: a power analysis to estimate the number of subjects, the source of subjects, included instruments or measures, and procedures for data collection that will be used to achieve the stated objectives. In this section, you need to justify the choice of method and explain the specific instruments to be used. The method should flow logically from the stated objectives and the theory described above.

#### **Analyses**

Describe your proposed data analysis plan (including specific statistical tests) and explain how these analyses will be used to test the proposed hypotheses.

#### **Timeline**

Provide a proposed schedule for data collection, data analysis, and data write up that provides an acceptable date for planning a thesis defense in accordance with the Department of Graduate Studies Guidelines. See below for details.

**MS Defense Content Guidelines:**

A thesis defense document can take one of two formats as dictated by the Missouri S&T Office of Graduate Studies. More information on these formats can be found here:

<http://grad.mst.edu/currentstudents/thesisdissertationinformation/formatting/>

The student and thesis advisor will decide on which format to use for the defense. Defenses that do not meet one of the two allowed formats, and that do not meet APA style and formatting standards (where applicable), will be sent back to the student for revisions and the defense meeting postponed.

**Important Dates & Deadlines:**

You should be prepared to discuss important dates and appropriate timelines with your thesis advisor. Research can be a time consuming process. In consultation with your advisor, you should prepare an appropriate timeline taking the following aspects into consideration.

- Students should identify whether or not they wish to conduct a thesis and identify their thesis advisor one calendar year before the graduate studies office thesis deadline for the semester in which you intend to graduate (typically March for May graduation and October for December graduation).
- In order to graduate on time, you should aim to have your thesis study proposal approved by the committee no later than the middle of your penultimate (second to last) semester in the program.
- The proposed timeline in the study should include a reasonable estimate of how the study will be completed by the academic dates/deadlines set by the office of graduate studies and your committee (<http://grad.mst.edu>).
- Thesis typically require revisions after the thesis defense. With this in mind, you should schedule your thesis defense to be at least 1 week prior to the office of graduate studies deadline for the semester in which you wish to graduate (<http://grad.mst.edu>).