Scoping the Research Program

Four main steps:

- 1. <u>Concept:</u> Decide on the research topic, and the general way in which the research will be conducted (e.g., lab, field, archives, documents, interviews, etc.)
- <u>Tentative Plan</u>: Now decide how much is enough (e.g., how many case studies? how many experiments?). Try planning for multiple futures best case, typical case, worst case. How do the estimated time lines differ?
- <u>Reality Check</u>: Now think about how to stage this work effort over the available time. Does the concept look reasonable or are changes required? Make sure to build in some extra time for unforeseen delays.
- 4. <u>**Revised Plan</u>**: If estimated prep time, research effort, and writing add up to more than the time available for the program, revisit (1) and (2) to determine where effort could be reduced without sacrificing quality. You may have to continue to revise the plan as the research evolves. The semester advisory committee meetings are a good opportunity for this.</u>

As with every other aspect of graduate studies, clear and effective communication between student, advisor, and advisory committee is the key to success. Careful advance planning lets you anticipate problems with resources, data, and analysis, helps the student stage the research and writing appropriately, helps reduce wasted effort, and shortens times to completion.

Some practical tools available for the scoping process:

- Model student program worksheet
- Thesis completion calculator from current date
- Thesis completion calculator from estimated completion date
- Semester progress evaluations

1. How much research is enough?

Master's Major Paper:

- Normally a review paper rather than primary research
- Must be comprehensive and thoroughly researched, but need not be a novel contribution to the discipline
- Publication is not usual but may be expected depending on program

Master's Thesis:

- Must be a modest new contribution to theory or practice
- A new idea, theory, interpretation, tool, etc.
- One modest contribution is enough
- Be wary of multiple projects several "small" projects can mushroom and force the writing of what are effectively several parallel master's theses (can extend timelines)
- New ideal, theory, interpretation, tool, etc. must be demonstrated conclusively but need not be fully examined or tested
- A publication is common but not universal

Doctoral:

- Must be a major new contribution to theory or practice
- A new idea, theory, interpretation, tool, etc.
- Needs to be fully and conclusively demonstrated, normally across a range of contexts or case studies
- Publication is expected; often several publications or book chapters will result from the work

2. How long should a thesis or major paper be?

There is no fixed or expected length for theses or major papers. However, more is not necessarily better. Examiners and indeed advisory committee members may be reluctant to read theses or project reports that are excessively long. The Faculty of Graduate Studies accepts the judgement of academic units as to what constitutes a thesis.

Master's Major Paper:

- Typically 60-85 pages in length including figures, tables, and references
- Does not normally but may include additional materials (maps, electronic media, etc.) as for thesis

Master's Thesis:

- Typically 125-150 pages including figures, tables, and references
- May incorporate bound-in photographs, larger documents (e.g., maps) folded to fit, or electronic media (e.g., CDs)

Doctoral:

- Typically 175-225 pages including figures, tables, and references
- May incorporate bound-in photographs, larger documents (e.g., maps) folded to fit, or electronic media (e.g., CDs)

3. What format is required?

The Faculty of Graduate Studies accepts theses and projects either in monograph or manuscript format.

Monograph Format:

- Chapters are organized around a central problem
- Traditional chapter format, for instance, Introduction, Literature Review, Methodology, Results, and Conclusions.

Manuscript Format:

- Chapters treat separate elements of the research program
- Typically incorporates several discrete articles suitable for journal publication
- Can include published articles, submitted articles, or unpublished work in publication format
- Publication or acceptance for publication of research results before presentation of the thesis in no way supersedes the University's evaluation and judgement of the work during the thesis examination process.
- **Must include c**onnecting materials that integrate across the different chapters/articles, including at minimum an overarching introduction and a concluding discussion chapter.
- The student must be the principal or sole author of any included manuscripts and must have had a major or sole role in the design of the research, and the preparation and writing of the manuscripts.

4. Estimating Time Lines

- How many courses are required? When are they offered?
- What field work or other research activities are proposed? How are they likely to be distributed in time?
- Use the model student program worksheet to map out likely time lines.
- If multiple field seasons are desirable, how will they be scheduled? Would it be possible to arrange winter admission so as not to delay the student while waiting for a summer field season?
- Use the thesis completion calculator worksheets to estimate the time required for completion from the present day, or to estimate the timing of major milestones from an estimated completion date.