Steve Whitmore & Mike Sjoerdsma
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Thesis Proposals and Theses

MISTER BOFFO

MORT, WHEN YOU SAY YOU DID YOUR DOCTORAL THESIS ON "MUD AND MUD HATS" IT SHAKES YOUR CREDIBILITY

Joe Martin
Learning Objectives

By the end of this module, you will understand some of the many administrative processes related to thesis proposals and theses.

As well you will know where to seek help with your thesis: http://www.sfu.ca/~whitmore/ensctheses/
Why?

- If you hope to continue your studies, many graduate schools expect that you will have completed an undergraduate thesis. Most graduate schools also require a CGPA > 3.0. Also good preparation for writing a Master’s thesis.

- Some companies are more likely to hire those who have completed an undergraduate thesis than those who have not. This may especially be the case given the current state of the economy.
When?

- Semester 7 – ENSC 498, Thesis Proposal (3 credits).
- Semester 8 – ENSC 499, Thesis (9 credits).
- Can combine thesis and proposal into a single semester if very organized. Rarely done.
- Usually have completed 115 credit hours and 3 work terms with a CGPA & UDGPA > 3.0.
- If aiming to graduate in semester immediately after defending thesis, timing is critical:
  - Defence can be difficult to arrange in April or August.
  - Revisions must be completed 3 weeks before convocation.
Where?

- Theses are often completed as part of a 4th coop term (contemporary economic conditions may pose problems).
- Also often done internally with a faculty research project (need to approach various faculty members in ENSC and other depts -- Physics, Kinesiology, Gerontology -- about suitable projects).
- Can also do an entrepreneurial project (Andrew is a possibility for Academic Supervisor).
- Be cautious with doing a thesis while on an international coop as the work may not qualify (e.g., Co-op Japan tends to be theoretical work rather than project-oriented).
Who?

- Must have 3 committee members, a least one of whom must have a PEng (two is preferred), before you can be registered.
- Choice of Academic Supervisor critical:
  - Project must be related to their expertise and interests (see ENSC website, [http://www.ensc.sfu.ca/people/faculty.html](http://www.ensc.sfu.ca/people/faculty.html)).
  - Should be someone you get along with reasonably well.
  - The Academic Supervisor ensures the project meets academic and professional requirements.
  - Must be an SFU Faculty member (ENSC & PEng preferred).
- Technical Supervisor:
  - Someone with a high level of technical expertise in topic (can be the Academic Supervisor).
  - An engineer, scientist, or equivalent (PEng preferred).
  - Will have relevant university degree, work experience, and professional qualifications.
Who (cont’d)?

- **Committee Member:**
  - Someone with an interest in topic and usually has some expertise (Mike Sjoerdsma may do this, but only for interesting topics, and NEVER if the person is merely looking for an editor).
  - May be other faculty or staff members at SFU or may be someone at a company or other academic institution.

- **Communication Faculty** (Steve or Mike):
  - Review thesis if required by Academic Supervisor.
  - Troubleshoot administrative problems.
  - We DO NOT edit theses (locate external resources).
  - Maintain Thesis Website.
Who (cont’d)?

- **Undergraduate Program Assistant, UGPA** (currently Margaret Crandell):
  - Deals with the administrative issues surrounding the thesis and proposal (registration, confidentiality, defence bookings, receives copies of proposal and thesis, processes grades and grade deferrals).
How (Proposal)?

1. Find a suitable project.
2. Identify potential committee members.
3. Contact committee members with a brief description of project.
4. Download 498 registration form from website.
5. Have academic supervisor and/or technical supervisor sign thesis proposal form.
6. Return form to UGPA.
7. Write proposal.
8. Submit proposal to committee members.
9. Make revisions and resubmit.
10. Submit signed proposal to UGPA.
How (Thesis)?

1. Download 499 registration form from website.
2. Do the work.
3. Confirm when committee members are available for defence.
4. Write draft of thesis.
5. Submit draft to committee members.
6. Submit draft to Communication Faculty (only if required by Academic Supervisor):
   - Complete on-line thesis checklist if not already completed.
   - Thesis must be submitted at least one month before defence.
7. Make appropriate revisions.
How (Thesis cont’d)?

8. Resubmit revised thesis to Academic Supervisor (and Communication Faculty, if required).

9. Determine what times committee members are available for your defence.

10. Ask Academic Supervisor to e-mail UGPA confirming readiness to defend. The UGPA will reserve a room for the defence.

11. Prepare a PowerPoint presentation for your defence.


13. Submit the signed thesis defense results form to the UGPA.

14. Make necessary revisions.

15. Submit revised thesis to committee members.
How (Thesis cont’d)?

16. Obtain committee members’ signatures on Approval Page.
17. Submit hard copies of the signed Approval Page (the UGPA will obtain the Director’s signature), the Title Page, and the Abstract to the UGPA.
18. Submit an electronic copy of the thesis (in .pdf format) to the UGPA. Ensure your student number does not appear anywhere in the thesis because the thesis will be posted on a website (after two years, in the case of a confidential thesis).
19. If you want a bound copy of your thesis, you can arrange for that with the Copy Centre in Room 2260, Maggie Bentson Center. Cost is $30.00 + HST (as of April 2011).
20. Graduation stuff (woo-hoo, you finally made it!).
What (Proposal)?

- Proposals are usually 8-12 pages in length with the following sections:
  - Title page
  - Approval form
  - Abstract
  - Table of contents
  - List of figures and tables (if required)
  - Introduction (problem, background, block diagram)
  - Description of tasks (includes a Gantt chart – may include budget)
  - Conclusion
  - References (if applicable)
  - Appendices (if applicable)
What (Thesis)?

- Title page
- Approval form
- Abstract
- Acknowledgements
- Table of contents
- List of figures and tables
- List of acronyms or technical terms
- Introductory chapter (problem, background, organization)
- Central chapters
- Concluding chapter (summary, what was accomplished, current status of project, what was learned)
- References
- Appendices
What (Defence)?

- A formal 20 minute presentation that outlines the problem, your research, and your solution/results.
- Following the presentation, audience will ask questions.
- Then the audience will be asked to leave.
- Then your committee may ask some additional questions.
- Then you will be asked to leave while the committee deliberates.

Possible outcomes:
- **Passed with Distinction** – no revisions (very rare).
- **Passed or Passed with Minor Changes** (most common).
- **Deferred – Major Revisions Needed** (occasionally).
- **Fail** (extremely rare).
A Few Other Issues

- If your thesis deals with a confidential topic, you must clear this with ALL your committee members (can be tricky if you are on coop and company requires an NDA). Note that theses will only be kept confidential for a maximum of 2 years.

- If you need to defer the completion of your thesis or your proposal, you are responsible for contacting your Academic Supervisor prior to the deadline for grade submission, and asking him or her to submit a deferral form. If you fail to do so, an “F” will be recorded on your transcripts. Note that the deferral only lasts until the end of the 1st week of classes of the subsequent semester. To continue the deferral, your Academic Supervisor must submit a Change of Grade Form.
Sources of Information

- Undergraduate Program Assistant!

- Note that the thesis webpage is at the following URL: http://www.sfu.ca/~whitmore/enscthesis/. It provides the following info:
  - Example thesis proposal
  - Example theses
  - Example PowerPoint slides for the defense
  - Assorted forms
  - Thesis checklist
  - (To be added: database with all theses)

- Check to see how current the info is by reading the posted powerpoint slides.
Conclusion

Questions?

I used to hate writing assignments, but now I enjoy them.

I realized that the purpose of writing is to inflate weak ideas, obscure poor reasoning, and inhibit clarity.

With a little practice, writing can be an intimidating and impenetrable fog. Want to see my book report?

The dynamics of interbeing and monological imperatives in Dick and Jane: A study in psychic transrelational gender modes. Academia, here I come!