

HONOURS THESIS SCHEDULE AND GUIDELINES
FOR SUPERVISORS AND STUDENTS IN 4040/6

Producing an Honours Thesis is a shared responsibility of supervisor and student. The following outline indicates particular responsibilities that lie with the advisor (indicated by A), the student (S), or with both jointly (AS). The schedule provides guidelines for optimally producing the finished thesis. Some guidelines are flexible and will vary for individual cases, whereas those shown in **BOLD UPPERCASE LETTERS** are firm and refer to Department or University regulation. Bracketed references are to Section 13.07 of the Department Handbook: Statements of Principle of the Honours Committee (Fall, 1992, p. 21). Additional copies of the forms attached to this document are available in the Psychology office.

1. S Sept Select primary and secondary advisors [2(a)].
2. AS **OCT 6** **SUBMIT COMPLETED HONOURS THESIS SUPERVISION FORM (ATTACHED) AND A COPY OF THE CONTRACT CONTAINING GRADING CRITERIA** [2(b)].
4. S 3rd Mon in Nov Submit proposal to each advisor [2(d)(i)].
5. A 1st Mon in Dec Thesis proposal approved by both advisors [2(d)(ii)]
6. AS Date varies Ethics approval: Advisors have primary responsibility to ensure that thesis adheres to Department and University requirements. Students are responsible under supervision to meet requirements.
7. A **JAN 12** **SUBMISSION OF THESIS PROGRESS REPORT**
8. S End of January Collect data [2(d)(iii)].
9. S End of February Analyze data [2(d)(iii)].
10. S March Submit first draft of thesis to each advisor [2(d)(iv)].
11. S End of 1st week after classes close Submit final draft of thesis to each advisor [2(d)(v)].
12. A **April 27, noon** **SUBMIT TO COURSE INSTRUCTOR THE HONOURS THESIS FINAL GRADE REPORT (ATTACHED) AND THE THESIS WITH COMPLETED TITLE PAGE (ATTACHED)** [2(d)(vi)]. If this deadline cannot be met, the student and advisors should take steps to avoid an F grade being entered by default. These steps may include official withdrawal from the course or a successful appeal for an extension (incomplete status).
13. S **MAY 11** **SUBMIT THE THESIS TO THE DEPARTMENTAL ASSISTANT FOR BINDING.**

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A) Introduction:

To complete an Honours Degree in Psychology, each student must engage in a research project under the supervision of self-chosen faculty members which culminates in an honours thesis. Typically, a student will approach faculty members with interest areas related to those of the student. Whether the early idea for a thesis topic originates from the student or from the advisor (and advisors have more experience in this kind of thing), the student will develop a research project idea in conjunction with the advisor(s). After developing the project idea in terms of the parameters of the course, the student generates a formal thesis proposal. When the proposal has been approved by the primary and second advisors and ethics approval has been secured, the student runs his/her study. After data collection and analysis, the student will write an account of the study following APA style. Copies will be submitted to both advisors for evaluation and a copy of the final product submitted to the Honours Committee for binding and placement in the Psychology library.

Note that the thesis course (PSYC-4040), although primarily organized in terms of directed supervision of a student research project, also includes a seminar on thesis related matters run by a faculty member. The thesis course instructor, as well as dealing with the seminar, cooperates with the Honours Committee in managing paperwork associated with the thesis.

B) Printed Materials Available for Purposes of this Course

(1) In order to (i) standardize report format, (ii) relieve faculty advisors of unnecessary questions about format, (iii) expose students to some of the discipline necessary in the preparation of data for public consumption, and (iv) understand some of what goes on in the preparation of APA (and other) journals, the Publication Manual of the American Psychological Association is required for writing up reports.

(2) Copies of theses from previous years are catalogued and kept in the Psychology Office. Each student is urged to at least glance through the products of previous courses in order to obtain the clearest idea of what may be expected of him/her in the final product of this course.

C) Supervision

Each student will approach a faculty member with a background and/or interest in the area the student wishes to pursue. Check the Department of Psychology website to identify faculty research interests. If a faculty member agrees to supervise the student, he/she will work with the student to generate and elaborate the project idea and to design the actual research. If the faculty member feels the problem is manageable in terms of the limitations of this course, he/she will (hopefully) agree to supervise the student's research. In consultation with the student, a second advisor will be selected - usually on the basis of particular expertise. In addition to the teaching function of the supervisor it will be his/her duty to make sure the student is operating within these guidelines.

Typically, the principal advisor will be a regular member of the department (who is not on leave). Occasionally, and for a variety of reasons, other individuals may serve as principal advisors; they might be retired members of the department, sessional lecturers, professional psychologists at other institutions, and so on. In such cases, the second advisor must be a regular department member and may be called upon to ensure that departmental and institutional procedures are followed. These occasional arrangements must be approved by the Honours Committee.

D) Sequence of Procedure in a Nutshell

- (1) ESTABLISH THE AREA OF INTEREST AND TENTATIVELY DEFINE THE PROBLEM. (This may lead you to consider the following: What questions are being raised? What hunches are being probed? What operations can be used to vary stimulation and/or to measure concepts? Can the data be collected within four to six weeks?)
- (2) CHOOSE A PRIMARY ADVISOR who is willing to supervise your problem area. With your primary advisor, choose a second advisor. (See above.)
- (3) IDENTIFY A RESEARCH QUESTION TO BE PURSUED. Under your advisor's guidance, you may review the literature systematically and summarize the relevant studies. Adequate review of the literature before designing the research is one of the relatively few major criteria for evaluating research. This is what September and October are for. Following these early discussions, a course contract should be worked out, signed by student and advisors, and filed with the Honours Committee. (See Guideline schedule)
- (4) REDEFINE (IF NECESSARY) THE PROBLEM AND STATE EXPLICITLY THE PURPOSE(S) OF THE PROPOSED STUDY AS IT RELATES TO THE LITERATURE REVIEW. (See G, Notes on the Method).
- (5) PROPOSE A TENTATIVE DESIGN.
- (6) PRESENT THE LITERATURE SUMMARY, THE PURPOSE(S), AND THE DESIGN to advisors for discussion as to whether the design permits an unambiguous conclusion relative to the purpose(s).
- (7) REDESIGN THE RESEARCH in the light of discussion on the hand-ins in consultation with advisors. At this stage, a RESEARCH PROPOSAL should be submitted to the advisors for approval; the form of this proposal may vary.
- (8) COMPLETE APPROPRIATE ETHICS FORM. When ready, a description of the research project together with the appropriate completed ethics forms is sent to the departmental RESEARCH AND DEVELOPMENT COMMITTEE. When approved here, the proposal may be forwarded to the university's SENATE ETHICS COMMITTEE for final approval. Data collection cannot begin until ethics approval is complete. This entire process can be time-consuming so students should be sensitive to these requirements and constraints as part of the research process. Because ethics reviewers at either the departmental or university level may require additional information or clarification, it is useful if the student provides contact information (such as an e-mail address) to facilitate quick communication.
- (9) If a pilot study is advisable, perform one.
- (10) CONDUCT RESEARCH. The length of time in data collection, number of subjects run, etc., that is, the amount of sheer work in data collection is NOT a very important criterion in evaluating research performance and product.
- (11) ANALYZE DATA AS PLANNED or as modified in the light of new information uncovered during data collection. Such modification should not be undertaken without advisement from supervisors.

(12) **DISCUSS THE RESULTS** in terms of previous findings, conclusions, and implications. In other words, what do your findings mean, and how do they contribute to psychological knowledge? What limitations are there to conclusions drawn?

(13) **PRESENT A REPORT OF THE RESULTS**, using APA format, for discussion. This report should include a modified reduced summary of your literature review and statement of purpose appropriate for the introduction section of an article, followed by a methods section, results section and a discussion section and preceded by a 100 to 120 word abstract,

(14) **PROVIDE FEEDBACK TO PARTICIPANTS** as outlined in your ethics proposal.

(15) **REWRITE THE REPORT** in the light of discussion and consultation with advisors and submit revision. This revision is the final form and constitutes the honours thesis that is presented for a final grade. The student will not be asked to make subsequent revisions as part of their course requirements; whatever deficiencies still exist at this time will be considered in assigning a grade. Students should note that many psychologists view the final version of a research report as typically the product of multiple revisions.

E) Evaluation:

The final grade will be determined on the basis of the degree to which the finished product meets the requirements established in the discussions held in September and stipulated in the course contract. The final grade will be assigned cooperatively by both advisors and submitted to the course instructor by the primary advisor. This will be forwarded to the Departmental Review Committee for normal processing.

F) General Criteria for Evaluation:

(a) **FIRST AND FOREMOST IS CLARITY.** Lack of clarity of exposition and lack of detail (especially in the procedure section) have cost the previous classes many unnecessary hours.

(b) **DOES THE STATED PURPOSE(S) CLEARLY FOLLOW THE LITERATURE REVIEW?** Here is our first look at continuity. What is step number X + 1 that follows after the X number of steps presented in the series? What did researcher A fail to control for that now will be controlled for? What implication derived from the review will now be followed up? To which other organisms, situations, or responses can the findings in the review be tested for generalization.

(c) **WILL THE DESIGN PERMIT THE TYPE OF CONCLUSION SOUGHT IN LINE WITH THE STATED PURPOSE?** Does the operational definition correspond to the construct used? Are there extraneous variables left uncontrolled? Is the measurement reliable enough? Is the statistical test (if one is used) appropriate? Are individual differences handled so as to minimize the error term?

(d) **ARE THERE ALTERNATE DESIGNS THAT WOULD ANSWER THE SAME OR SIMILAR QUESTIONS?** This question is important for purposes of the course, not because we want the student to change his/her design, but because the student must learn that there are a variety of methods for getting at some problem area if not the very same particular question. He/she must learn that different "schools" of psychologists typically adhere to their own preferred methods and that different kinds of information about the very same variables can be obtained by the use of various methods. He/she must learn that his/her own method answers only part of the overall question and he/she must become aware of how limited his/her own particular method is.

(e) IS THE ANALYSIS CLEAR, NONREPETITIOUS, AND READILY COMPREHENSIBLE BY PROPER VERBAL, TABULAR AND GRAPHIC PRESENTATION? Is APA format followed regarding the placement of materials in the results vs. discussion sections and regarding duplications in script and in the tables or figures?

(f) DO THE CONCLUSIONS PROPERLY FOLLOW FROM THE FINDINGS? Are interpretations supported by the literature surveyed and by new literature that now seems especially pertinent? Are alternative interpretations offered and possibly differentially evaluated? In the case of correlations, is it clear that the findings offer no direct support for any directional hypothesis?

(g) WHAT ARE THE IMPLICATIONS OF THE FINDINGS FOR (i) DESIGN, (ii) FUTURE RESEARCH, (iii) THEORY DEVELOPMENT, AND (iv) IF OBVIOUS, FOR APPLICATION TO THE NEEDS OF SOCIETY? Here is our second look at continuity. We go from what has been done (literature review) to what we will do and are doing to what our findings imply with respect to what we or others might do in future. This aspect is one of the most creative and challenging to the student.

(h) WHAT ARE THE LIMITATIONS OF THE FINDINGS IMPOSED BY THE DESIGN AND BY FAILURE TO FOLLOW ONE OR MORE DESIGN COMPONENTS? The limits will be discussed in terms of internal and external validity, especially the latter because the former will in part be covered under (f). To which populations of subjects can the findings be generalized? To which conditions or stimulus situations can the findings be generalized? Stimulus situation includes items like the experimenter or confederate, the obtrusiveness of the manipulator, the credibility of the experiment, the state of mind induced by the experimenter, the instructional set presented, etc.

G) Notes on the Method:

Complete description of the subjects is necessary. How and where are they obtained? If lab animals, what strain are they, what is their sex, age and maintenance schedule before and during testing? How many are there and how are they, and in what numbers, assigned to treatment, classifications, and cells? Complete description of the apparatus is necessary, whether the apparatus is hardware or software. Why did you select it, and what are its properties? If it is a generally unfamiliar apparatus, elaborate on its properties beyond the requirements of APA format for purposes of clarity. If the apparatus measures evoked potential, spare no words to make sure all readers of your paper have a good, although rough idea of what is being measured. If the apparatus is a Q sort device measuring whatever, again spare no words to make sure everyone will know just what a Q sort is and how the subject performs on a Q sort. If the apparatus is to be built from plywood, plexiglass, and beaverboard (within seven days, of course), give the dimensions or draw a picture of it. If the apparatus is a typical open-field box used to measure "temperament" in the rat, and you know what the box looks like and know that it is a common piece of equipment, nevertheless assume that the reader has never heard of it before. If the subject must perform some relatively complex set of acts, do not spare the details. Determine and report how various levels of performance will be assigned a numerical value or placed in categories, and how these assignments or category memberships will be summarized by some descriptive statistics. Determine and report what inferential statistic(s) (statistical test) will be used (or other method) for judging whether your results could have been obtained readily under any form of null hypothesis. All the above items must be determined BEFORE subjects are to be run, not afterwards.