

INFORMATION FOR HONORS THESIS ADVISORS

H O N O R S

The Honors Program

The Honors Program in Undergraduate Biology provides an opportunity for our best undergraduate biology majors to conduct original, independent research under the direct supervision and guidance of a Cornell faculty member, and to report the results of that research in a written thesis that is reviewed by experts in the field. To qualify for the Honors program the student must meet standards set by the Honors Committee, and maintain a 3.0 GPA (overall and science). Once students are accepted into the program they will be assigned to an Honors group based on the research field of their project. Each honors group has a faculty member who serves as group leader for the year.

Supervision of Honors Students

It is a policy of the Undergraduate Biology Major that the person supervising the research should be a faculty member and not a graduate student, research associate, or technician. We recognize that it is possible for undergraduates to have productive research experiences with non-professorial sponsors, but the Honors Program Committee believes that an honors student deserves the special attention of a faculty member. Also, honors theses are widely used to supplement applications to graduate schools and so represent the quality of science at Cornell to the outside world.

The Honors Project

Honors projects must be individual, creative projects that generate novel findings. Although it is not required, the Honors Program Committee does encourage students to begin work on their research prior to the start of the senior year, often in the summer after their junior year. Opinions may vary as to the creative originality required of the student in formulating his or her honors project. Virtually all students, however, will need advice in constructing a project that fits realistically within his or her time and laboratory resource boundaries.

A student should be discouraged from submitting a thesis for honors unless the results are of real importance. Likewise, many honors research projects go awry, leaving the researcher with no results despite the best of efforts. Students should be encouraged to appraise their work realistically, and discouraged from submitting insignificant or inconclusive theses.

It may also become obvious at times that a particular student will simply be unable to complete his or her honors research and thesis on time. This must be conveyed to the student; a specific schedule should be agreed upon by the student and the supervisor in advance.

The Honors Thesis

The thesis should be written in the form of a research report in a leading journal in the disciplinary area of research. The Honors Group Leaders will suggest a journal style that is appropriate to the discipline. In general, the thesis should consist of a short introduction, relevant materials and methods, a concise presentation of the meaningful data, and a discussion of the conclusions that does not delve into inappropriate speculation. Generally, the thesis should not exceed 20 typewritten pages, double-spaced, but not include figures and tables. The student's research schedule should include time for ample consultations with the supervisor for discussion and agreement on the form of the thesis. Since few undergraduates have the

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familiarity with the conventions of research style that the supervisor has, part of the supervisor's job involves conveying these conventions to the student.

Level of Honors:

Recommendation to the faculty that a candidate graduate with honors is the responsibility of the Honors Program Committee. The quality of the thesis, as judged by the reviewers and the Honors group leader, along with the student's final grade point average will determine the level of honors awarded. Students in the College of Arts and Sciences will be awarded Latin honors for their work. Students in CALS will receive distinction, with no level recorded on their diploma.

Guidelines for the Thesis Advisor

In an attempt to bring some uniformity to the guidance and evaluation of honors theses in Undergraduate Biology, the Honors Program Committee has prepared the following guidelines for faculty thesis advisors. We hope that you realize that uniformity of treatment in the Honors Program is a desirable goal in itself, and that you will follow these guidelines. The Honors Program Committee welcomes your opinions on these guidelines, and will periodically review them in accordance with the wishes of members of the faculty.

- GUIDELINE 1. Do not accept an honors student unless you can devote the time necessary to supervise his or her research, including a critical review of the written thesis. Please do not take a student if you plan to be on sabbatical leave in the spring.

- GUIDELINE 2. Make sure that the thesis project is executable within the time and resource constraints (see list of deadlines, below). This is best accomplished by establishing with the student a detailed schedule that allows ample time for mistakes and disasters. The schedule should specifically allow time for writing and revising the thesis before it goes to the reviewers.

- GUIDELINE 3. Do not attempt to "save at all costs" an honors thesis if--for whatever reason--an honors-quality thesis cannot be produced. Do not hesitate to inform the student of this and to remove the project from the Honors Program.

- GUIDELINE 4. Make sure your honors student's thesis is in a presentable form before it goes to anonymous reviewers. This is the version of the thesis that will be used to determine the level of honors. This means that the quality of writing in the paper is such that you would not hesitate to submit it to a journal if it were your own manuscript. Beginning in May 2004, biology honors theses will be available on the Mann library web site.

Honors Program Deadlines

- 1. Application for Admission: Applications for admission are due in 216 Stimson Hall by 12:00 noon, Friday, September 11, 2009. A copy of the application, a project statement, the advisor agreement signed by the thesis advisor, and an **UNOFFICIAL TRANSCRIPT** must be submitted.

2. Outline of Thesis: An outline of the thesis must be submitted to the Honors Seminar Group on February 9, 2010. The outline must include an introduction identifying the subject of the research. It should also detail methods, current results, and literature cited. The student must include a list of future experiments. The outline must be signed by the Honors Thesis Advisor.
3. Thesis to Thesis advisor: One copy of the thesis must be submitted to the honors thesis advisor for evaluation by Tuesday, March 23, 2010.
4. Thesis to Seminar Group Leader: Three copies of the thesis are to be submitted to the Honors Seminar Group Leader not later than 12:00 noon, Thursday, April 8, 2010. The copies should be stapled or bound together and include page numbers. This is the version of the thesis that will be evaluated for honors.
5. Completing the Honors Process Info Session (**MANDATORY FOR ALL HONORS CANDIDATES**): Students must attend this info session on March 30, 2010, at 4:45pm, location TBA.

Thesis Reviews:

It is the responsibility of the Honors Committee member of each Section to have the thesis reviewed by two anonymous faculty members, preferably faculty members of the departments comprising the undergraduate biology major. The reviewers will recommend levels of honors.

The anonymous reviewer's comments must be submitted to the Honors Seminar Group Leader by Friday, April 23, 2010. Comments will be available for the student to pick up from the Seminar Group Leader on or after the same day, depending on their availability.

If the reviewers suggest revisions, the honors student, with consultation from their Thesis Advisor, must consider these suggestions and submit a letter to the Honors Group leader addressing the required revisions. This letter must accompany the final draft of the thesis.

The faculty thesis advisor must submit an evaluation of the thesis and a certification of thesis review to the Honors Seminar Group Leader. The evaluation should include judgment of the significance of the problem, the particular accomplishments of the student in solving the problem, and the thesis. **The Honors Thesis Advisor's evaluation must be in the hands of the Honors Committee member not later than 4:00 PM, Friday, May 7, 2010**.

The unbound thesis should be submitted to the group leader along with revision comments. Students in CALS should submit two copies of their thesis (one for the College, one for the Undergraduate Biology major). Students in the Arts College only need to submit one final copy.

Final revised theses are due to the Honors Seminar Group Leader by 4:00 p.m., Friday, May 7, 2010. Please do not staple or use any type of binder for the final version of the thesis.

All recommendations will then be reviewed by the Honors Seminar Group Leader for each program of study and by the Honors Committee. Final authority for awarding of all levels of honors rests with the Honors Committee. Students will be notified of their level of honors the week of May 17th.

Honors Presentations

All Honors candidates will give a public presentation on their Honors research during the spring semester. The presentation will be either at a scientific poster session, or a 10-minute talk in a department seminar. Dates of presentations will be announced in late March 2010.

BioG408- Presentation Skills for Honors Students:

This 1-credit course covers writing, speaking and presentation skills important for students finishing their undergraduate research. The course consists of several lecture/discussion sections and several practice sessions for oral presentations. Information on the class is available from Laurel Southard (216 Stimson, 4-4533, les3). Students in the Biochemistry Honors group are required to enroll in BioG408. All other honors students are encouraged to enroll.

Questions about the Honors Program:

Questions about the Honors Program should be addressed to the Honors Program Coordinator, Laurel Southard, 216 Stimson Hall, (les3, 4-4533).

**Applications to the Honors Program w/ Unofficial Transcript are Due to
Pamela Davis in 216 Stimson Hall
by 12:00 p.m., Friday, September 11, 2009**