



Department of Biology BIOLOGY HONORS THESIS GUIDELINES

Students performing intensive undergraduate research in Biology have the option of achieving an Honors Thesis. After completing BIOL 390 and 391, students majoring in Biology will be qualified to register for BIOL 395, Honors Research in Biology I. During this course the student must present a thesis proposal to the mentor for approval. A passing grade for BIOL 395 qualifies the student to register for BIOL 396, Honors Research in Biology II. In order to receive a passing grade for this course, the student must (1) write a paper based on the student's research, as outlined below; and (2) present and defend the research to an Honors Thesis Committee.

The Biology Honors Thesis Proposal and Thesis should be written by the student in accordance with the following:

- Proper grammar, style, and spelling.
- Research paper format:
 - *Thesis only*: Title Page. A template is included in this document.
 - Abstract (on its own page, no more than 200 words, in terms understandable to any college student)
 - Introduction, Methods, Results, Discussion. (In some cases, at the discretion of the mentor, these headings will be inappropriate and can be replaced with others).
 - References. (Any standard professional format is acceptable; no websites, newspapers, magazines, other popular sources, or unpublished manuscripts; cite references in text by author and year)
 - *Thesis only*: Acknowledgments and Contributions. This should include all workers on the project and their roles, including that of the student.
- Entire document after the title page double-spaced, 12 point font, 1 inch margins on all sides.
- Include any tables or figures in their final form embedded in the document in the place where they should appear. Tables should have titles above them. Figures should have captions below them. Tables and figures should be completely understandable apart from the text.
- Students contribute to research in a variety of ways, not all of which involve conducting a study from start to finish, especially in a single term. The thesis need not be restricted to the student's own work, but can be based on a broader study conducted by a team, in which the student contributed in a particular way. However, the proposal and thesis should focus as much as possible on the student's own work, and should represent very clearly in the Acknowledgments & Contributions section how the student contributed to the work. Use the first person when appropriate.
- Course-specific guidelines. Length refers to main body text (Intro through Discussion, excluding Acknowledgments & Contributions, References, Figures, and Tables).
 - BIOL 395 (Honors Research in Biology I) *Thesis Proposal*: 8+ references, 3-10 pages.
 - BIOL 396 (Honors Research in Biology II) *Thesis*: 15+ references, 8-20 pages.

In the term during which the student is taking BIOL 396, the student and mentor should assemble an Honors Thesis Committee of at least three faculty members, at least two of which should be members of the QC Biology Department and one of which should be the student's faculty mentor. The completed thesis, approved by the mentor, should be sent to other committee members at least one week prior to the date of the presentation and defense. The oral presentation should last 20 minutes, followed by a question and answer period (defense) regarding both the seminar and the thesis. The student will then leave the room, and committee members will decide whether to pass the student immediately, to request revisions with or without a second meeting, or to deny credit for the thesis. As an alternative to requiring revisions, the committee may decide to accept credit for the thesis but represent shortcomings either in the student's grade or by rescinding the honors status of the thesis (rendering it a Biology Senior Thesis). The committee should indicate its decision in writing on a master copy of the thesis, which the student will submit to the Department by the last day of final exams. The title and signature page is included in this document. After the last day of final exams, a student with a missing or insufficient report, or any student whose thesis or defense has not been successfully completed as indicated by written committee approval, will either receive an incomplete, or a BIOL 396 course grade without the distinction of an Honors Thesis, at the discretion of the mentor.

Students are strongly recommended to solicit the aid of their mentors in writing their research proposals and theses. The due date for the thesis proposal, thesis, and defense is **the last day of final exams**. Students are also encouraged to present and defend enough in advance of this deadline to allow for revisions required by the thesis committee to avoid an incomplete for the term. Most students taking BIOL 396 will be seniors, but this is not required. Students are cautioned that completing their research, writing their thesis and presentation, and defending it, is a significant amount of work. Some students will find it difficult to do all of this in their last term while they are completing requirements for graduation, and usually it is not advisable to schedule the defense during finals week when the student is taking classes, both because it is a very busy time and because no time is left for any revisions.

The student should submit the defended thesis with title page signed by the mentor; and the Undergraduate Honors Thesis Approval Form (included in this document), to the Department in electronic form by the end of the student's last undergraduate term. This may be sent as an email attachment to the QC Biology Undergraduate Research Coordinator at david.lahti@qc.cuny.edu. The thesis will be displayed in the Department and the student and committee will receive softbound copies.



QUEENS COLLEGE of THE CITY UNIVERSITY OF NEW YORK

Undergraduate Honors Research Thesis Approval Form

Ms.
Mr. _____

a candidate for the degree of Bachelor of Arts, has satisfactorily completed an honors undergraduate research thesis associated with BIOL 395 and 396, Honors Research in Biology I and II, entitled:

_____.

This thesis has been successfully defended before the following committee.

_____ Supervisor	_____ Signature	_____ Date
_____ Member	_____ Signature	_____ Date
_____ Member	_____ Signature	_____ Date

This thesis has been approved by the Department of Biology.

_____ Biology Undergraduate Research Coordinator	_____ Date
_____ Biology Department Chair	_____ Date

**EXPERIMENTS IN PLANT HYBRIDIZATION: BEING AN INVESTIGATION OF THE MECHANISMS OF
INHERITANCE OF THE GARDEN PEA (*PISUM SATIVUM*)**

by

Gregor Mendel

Submitted as an Honors Thesis in Biology at Queens
College of The City University of New York

April 1866

Approved by: _____
(Sponsor)

Date: _____