

MASTER'S DEGREE

Department of Biology
University of Oregon

The Department of Biology offers several programs leading to the Master's Degree. The Department will grant Master's degrees en passant to the Ph.D. candidates if they wish, and as a terminal degree to those who are not in the Ph.D. program.

1. Qualification for Admission to Program:

- a. Graduate eligibility (see General Catalog, Graduate School section).
- b. Graduate Record Examination scores for aptitude portion of test (advanced test in Biology, Chemistry, or Biochemistry is recommended but not required).
- c. Adequate GPA (this is determined by the Graduate Admissions Committee on an individual basis).

2. Requirements to Receive Degree:

Departmental requirements are the same as those set forth by the Graduate School (*see General Catalog). Briefly: 45 hours of graduate credit for a M.S. with thesis or 60 hours of graduate credit for Master's Degree Without Thesis. In either program, at least 30 hours must be in graduate-level Biology courses; 24 hours of the 45 or 60 hours must be graded, with a GPA of 3.0 or better; 9 hours must be in 600-level courses. Up to 15 hours of graduate credit (3.0 or better) earned at another institution may be transferred and counted toward a University of Oregon Master's Degree, but those hours may not be used to meet the graded hours requirement, nor can they have been used to fulfill any part of the baccalaureate degree. **PLEASE NOTE THAT YOU MUST APPLY FOR YOUR DEGREE AT THE GRADUATE SCHOOL.**

(*Graduate students must maintain at least a 3.00 grade point average [GPA] in graduate courses taken in the degree program. Grades of D+ or lower for graduate courses are not accepted for graduate credit but are computed in the GPA. Similarly, the grade of N [no pass] is not accepted for graduate credit. A grade of pass [P] must be equal to or better than a B-. A GPA below 3.00 at any time during the graduate student's studies or the accumulation of more than 5 credits of N or F grades -- regardless of the GPA -- is considered unsatisfactory. The dean of the Graduate School, after consultation with the student's home department, may drop the student from the Graduate School, thus terminating the student's degree program.")

There are two routes that lead to a Master's Degree -- one involves writing a critical essay, the other involves research and preparation of a thesis.

A. Master's Degree without Thesis (this option is not normally available for students in residence at Oregon Institute of Marine Biology). In the Biology Department this degree program must include a Critical Essay. A description and general guidelines for the essay are attached. Students must register for at least 6 credit hours of Reading and/or Research to reflect effort performed in fulfillment of the essay requirement. **DO NOT REGISTER FOR THESIS HOURS IF YOU PLAN TO WRITE A CRITICAL ESSAY.**

B. Master's Degree With Thesis. The thesis is the end result of independent research and must be written according to the Graduate School requirements as set forth in the "Style Manual for Theses and Dissertations." When the thesis is completed, the student must present and defend it before a committee of three faculty members, one of whom will be his/her major advisor. A student writing a thesis must register for a total of 9 credits of 503 Thesis and must be registered for 3 credits of Thesis the final term of study if he/she is completing a master's degree thesis during that term.

C. Language Requirement. For a Master of Science, there is no language requirement. For a Master of Arts, two years (or equivalent) of French, German or Russian are required. This requirement may be satisfied by courses or an examination administered by the student's advisory committee.

Critical Essay

Master's candidates who are not writing a research thesis are expected to prepare and defend a Critical Essay on a topic of current interest in Biology. The purpose of the essay is to permit each student, working with an advisor, to examine a specific area in the biological sciences in greater and more critical detail than is possible through course work alone.

The guidelines for the essay are somewhat flexible, and the details for a particular individual should be worked out between student and advisor. In general, the topic selected should be sufficiently circumscribed that a brief but scholarly treatment is possible. It is expected that most essays will be less than 30 double spaced manuscript pages - critical detail rather than length is the major criterion for a successful essay.

Preparation for, writing, and defense of the essay should be equivalent to 6 hours of credit - Reading and/or Research.

The following timetable and set of procedures will enable students to complete the Master's degree within four terms.

Term I: By the end of the first term, each student should be associated with an appropriate advisor, and a written statement to this effect should be given to the graduate program coordinator. Advisors are selected generally in terms of broad interest areas.

Term II: By the end of the second term, two additional steps should be taken: 1) together with the advisor, the student should select an essay topic and tentative title; 2) student and advisor should select two additional faculty members to serve on the student's essay committee. The latter information should be forwarded to the graduate program coordinator in written form. The purpose of the committee is to increase student contact with the faculty and to serve as a review group in the final evaluation of the essay. The graduate program coordinator should be notified in writing of any change in advisor or committee.

Term III: It is desirable that each student plan to submit a detailed outline of the essay to his/her advisor and committee members by the middle of the third term. This will allow sufficient time for final writing in the fourth term. A committee meeting should be held after the outline is distributed and before the end of the third term.

Term IV: At least one month (30 days) prior to the end of the fourth term, the student should submit three copies of the final essay to his/her committee. A fourth copy is to be retained by the student. In addition, each student should arrange with members of his/her committee for an oral defense of the essay no later than the Graduate School deadline for submitting the "Completion of Requirements for Master's Degree" form. One copy of the successfully completed essay must be given to the graduate program coordinator for filing in the Biology Office.

Essay Format General Guidelines

The essay topic chosen should reflect the interests of the candidate and of his/her advisor. No original research is required (or desired) in preparing the essays. Rather, each essay is to develop the current level of knowledge pertaining to its topic. Model length is 15-30 pages.

A general guide to the essay format is the following:

I. Introduction

This section is to contain a definitive statement of the topic and a discussion of its relation to biology as a whole.

II. Development of the Topic

Essentially this section is expected to give a comprehensive literature review of pertinent observations, experiments, and concepts that have been applied to the topic. When possible, published work of the most recent two years should be emphasized. Appropriate figures, tables and experimental designs should be included if they clarify the main text.

III. Discussion and Conclusions

Emphasis in this section is to be placed on integrating the articles discussed in Section II. Special attention should be given to focusing on the most critical data and bringing out any apparent experimental inconsistencies. Also in this section, general biological concepts and creative thinking should be used to provide fresh viewpoints in to the topic. Future possible lines of research in the area should be suggested.

IV. Summary

This should be a brief (300 word) statement of the problem, approach, and conclusions.

V. Bibliography

Indicate sources of all material discussed in the essay.

VI. Appendix (optional)

If further detailed documentation of any part of the essay is required, it should appear here.