Masters of Science Degree Plan A: Thesis

DEPARTMENT OF BIOLOGY

CASE WESTERN RESERVE UNIVERSITY

DEPARTMENT OF BIOLOGY

Masters of Science Degree (Plan A) Thesis

The Plan A Master of Science Degree in Biology is a thesis, graduate degree program. The purpose of the program is to provide advanced exposure to biology for interested professionals, to provide additional training for those wishing to resume or change careers, or to provide additional preparation in biology for students interested in pursuing professional studies in the health sciences. Students are required to write a M.S. Thesis.

REQUIREMENTS FOR THE MASTER'S DEGREE

The Biology Graduate Affairs Committee (GAC) assigns an advisor to each candidate. If the candidate has another preference, the student is free to obtain an alternative advisor. Within the first semester of study, the candidate and advisor must complete a Program of Study form and submit it to the Chair of the GAC. The Program of Study will specify the course work required to complete the academic requirements for the M.S. Degree and may be amended at any time during the degree program as circumstances warrant. By the end of the first year of study, the candidate and advisor must submit 2 nominations to complete the formation of an advisory committee, which will monitor the candidate's program and conduct the final examination. The selection of an advisory committee also signals the area of concentration in Biology (chemical biology, cell and molecular biology, organismal biology, or population biology) that will form the basis of the comprehensive portion of the final examination. These nominations will be submitted to the Chair of the GAC for its approval. At least two members of the Advisory Committee must hold faculty appointments in the Biology Department. The GAC will approve members of the Advisory Committee with regard to their competence in the area of biology selected by the student and advisor. The candidate must meet with the Advisory Committee at the end of the first year of study.

A. ACADEMIC REQUIREMENTS

1. Program of Study

All candidates must complete a total of 30 credit hours in course

work at the 300 level or higher within 5 years of matriculation into the graduate program. At least 18 of these credit hours must be must be at the 400 levels or above. Further, at least 15 credit hours must be in courses offered by the Biology Department. The remaining course work may include courses offered by any department within the University, subject to the advisor's approval and Graduate School regulations. Candidates are limited to 3 credit hours of BIOL 601, Research in Biology, but may take up to 9 credit hours of BIOL 651, M.S. Thesis Research. According to rules of the Graduate School, once a candidate registers for BIOL 651, the registration must continue for a minimum of 3 credits per semester until completion of degreed program. Students who are uncertain about completing requirements for a Plan A masters degree should consult the regulations for the Plan B masters degree. These two masters degrees have different regulations concerning use of BIOL 601. A candidate may wish to use BIOL 599 the letter grade assigned will reflect the evaluation by the entire Advisory Committee. The candidate's program of study must also include a formal oral presentation in a seminar or journal club on a topic different from the candidate's research topic.

2. Maintenance of Good Standing

To maintain good standing, a candidate must complete a program of study after the first semester of graduate study and have a cumulative grade point of 3.0 or higher at the end of each year. Receipt of two grades of "C" or a grade of "F", "NP" or "U" in any courses will be considered cause for separation from the graduate program.

B. EXAMINATION OF CANDIDATE

Candidates for the Master of Science degree are required to report to the Chair of the GAC by the end of the first month of the final semester of study in order to schedule the examination. The candidate must also obtain all appropriate forms for completion of the degree program from the Graduate School. Failure to comply with these regulations may prohibit a student from completing degree requirements for that semester. The candidate's Advisory Committee with a non-voting member of the GAC will serve as an Examining Committee. At least one month prior to the examination, the Examining Committee must meet with the student to give the student guidelines on the scope and resolution expected for the comprehensive examination.

1. Examination Format

The examination will be in two parts:

- A comprehensive oral examination in one of the four areas of biology (chemical biology, cell and molecular biology, organismal biology, or population biology) as selected with the formation of the candidates advisory committee.
- An oral defense of an M.S Thesis.

1. Examination Results

The Examination Committee will recommend one of the following outcomes of the final exam:

a. Pass.

All three examiners agree that the student has passed both parts of the exam.

b. Fail with recommendation for reexamination in one or both parts of the exam.

At least one of three examiners votes to fail candidate on one or both parts of the exam.

c. Fail.

All three examiners vote to fail the student and do not recommend re-examination or one or more examiners vote to fail a candidate on one or both parts of a reexamination. The candidate may appeal to the GAC for review. The GAC may then set another examination or reexamination or sustain the Examination Committee's decision.