Policies and Procedures for the Masters of Science (M.S.) Degree

Effective for students entering January 2011 This document is 6 pages long.

> Department of Molecular Biology University of Wyoming

Students pursing the M.S. degree in Molecular Biology are expected to complete their program in 2 to 3 years, on average. Master's students have a maximum of six calendar years to complete their degrees from the beginning of the first course taken and listed on the Program of Study according to University regulations (see the Graduate Bulletin). <u>http://www.uwyo.edu/registrar/university_catalog/grad_students.html</u>

1. Application Process and Choice of Thesis Project Adviser

A person interested in pursuing an M.S. degree in Molecular Biology is expected to directly contact molecular biology faculty members in order to identify a sponsor/ adviser of their study. Once an adviser is identified, a complete application package for the graduate study should be submitted to the Molecular Biology Graduate Program Chairperson via e-mail. The application package consists of Letter of interest, current CV, copy of Academic Records, and copy of GRE and TOEFL (if applicable). The GRE and TOEFL scores and GPA must meet University of Wyoming graduate admission standards. In rare cases, when agreed to by the adviser and admissions committee, the GRE requirement may be waived. The applicant is expected to arrange for at least two Letters of Recommendation and a Letter of Commitment from the adviser to be sent directly to the Graduate Program Chairperson via e-mail or regular mail. The Molecular Biology Graduate Committee will make the preliminary admission decision based on the application package and letters. If the preliminary decision is positive, the applicant is expected to arrange for original academic transcripts and GRE and TOEFL (if applicable) results to be sent to the Office of Admissions. Following review and authentication of records, a formal letter of admission will be sent to the applicant.

2. Program of Study

A Program of Study for a student must be filed to the Molecular Biology Graduate Program Chairperson and Office of Registrar before the end of the fall semester of the First Year. The Program of Study must include a minimum of 30 semester hours of credit at the 4000-level or above from UW or equivalent levels from another approved university (see transfer credit below). 15 of the 30 hours must be completed as specified below:

Requirements for fulfilling the 15 specified hours of the 30-hour requirement:

• 6 hours total of General Biochemistry MOLB 5600 and MOLB 5610 with grades of B or better. (If a student has already taken the MOLB 4600/4610 sequence as an undergraduate or MOLB 5600/5610 as a graduate student and received grades of B or better in each course, the General Biochemistry requirement will have been fulfilled

and thus only 9 of the 30 hour-requirement will be specified. Also, if a student passes out of the Biochemistry requirement by taking an exam at the beginning of the first semester, only 9 hours of the 30 hour-requirement will be specified.)

- 1 cr of MOLB 5050 must be taken the first semester a student enrolls.
- MOLB 5051 or 5052 must be taken each other semester that the student is in residence (minimum of 2 credits).
- 6 hours of the advanced molecular biology core courses (5000 level courses).
- Please note that credits earned in ENGL 5910 *cannot* be included in the Program of Study even if a student is required to take this course. MOLB 5900 *can* be included in the Program of Study.

The program of study must be approved in advance by the Department Chair and the Dean of the College of Agriculture.

3. Transfer Credit

No more than 12 semester hours may be transferred as described in the online graduate bulletin. All transfer credits must carry a grade of B or better and are subject to the approval of the advisor.

4. M.S. Committee

The student's major adviser will serve as chairperson of the student's. The remaining committee members (at least two) will be recommended jointly by the major adviser and the student involved. At least one committee member must be a member of the graduate faculty from another department at U.W. An additional member (making a total of four) may be added to the committee (see Graduate School Bulletin). An additional member does not necessarily have to be a faculty member from this university. The committee must be approved by the Department Chair and the Dean of the College of Agriculture.

5. Continuing enrollment

Once a student has completed 90% of their course work and has a program of study filed, the student may register for only 1 credit hour per semester instead of being a full-time student. A student may wish also to enroll in 1 credit of MOLB 5960 in order to have a record of enrolling in research credits, however this is not a requirement.

A student has an option of enrolling as a part-time student after having completed 90% of their coursework or for other reasons. This needs an approval of the adviser for each semester. In the case of part-time student status, the student should arrange to receive the optional fee package by filing a "Petition for the optional student fee package,". (To complete this form, a student will need the date on which the Program of Study was filed). The optional fee package will enable the student to have the same benefits as a full-time student (access to student health, etc.) If the optional fee package is to be purchased, it must be done by the last day to add a course each semester (see the Graduate Catalog and the Class schedule.) Registration for only 1 credit hour plus the optional fee package will allow a substantial savings in tuition and fees' cost.

A student who elects to enroll as a part-time graduate student is still eligible for the full graduate stipend. If a student has a loan such as a Stafford federal loan, they may be required to enroll for at least 4.5 credit hours in order to retain eligibility for the loan.

6. Research Proposal

The first year M.S. student must submit to the members of their committee, by one month following completion of their second semester in the program, a brief Research Proposal of approximately 4000 words excluding references. The proposal, based on a literature review and the proposed M.S. thesis research, should consist of at least the following sections:

- 1. Background and Significance
- 2. Specific Aims
- 3. Preliminary Results
- 4. Overview of Experimental Design
- 5. Expected Results

The M.S. candidate is required to make an oral defense of the Research Proposal to the thesis committee not more than 90 days following submission of the written proposal. If the proposal and/or defense are not satisfactory, the student has up to three months to repeat the process. Failure on the second attempt will result in dismissal from the master's degree program. Once the student has successfully completed the oral defense of the proposal, a "Completion of Research Proposal" form must be filed with the Molecular Biology Graduate Program Chairperson within one week after the oral defense.

7. Evaluation of Satisfactory Degree Progress

Progress will be evaluated by the thesis committee on the basis of the Research Proposal and oral examination. If the student has not yet completed a thesis, at the end of the second year, evaluation will be based on a student presentation to the thesis committee. The thesis committee will do any subsequent evaluations on a semester basis. Unsatisfactory progress may lead to dismissal from the Graduate Program.

8. Teaching Duties

Master's students are encouraged to serve as teaching assistants if it fits their career goals. If students choose to teach, then the department chair should be consulted on course assignments.

9. Support

Financial support is at the discretion of the adviser. The following conditions may result in termination of financial support: cumulative GPA below 3.0, unsatisfactory progress as determined by the committee, termination of candidacy for the M.S. degree, or completion of two years of support unless the adviser approves a written request by the student for an extension of the grant-supported position.

10. Final Thesis Preparation and Defense

Before the final thesis defense, the student is required to review the proposed content of the thesis with the student's thesis committee prior to commencing the writing or at least 3 months prior to the anticipated date of the defense. This meeting provides the student with the advantage of an early review. The thesis should then be presented in typed form to the student's committee at least three weeks prior to the scheduled defense. Faculty members will have 10 days from the date of receipt of the manuscript to suggest major changes in content and register any other significant objections. Masters candidates must have completed course requirements as specified earlier. The student will take an oral examination by the student's thesis committee. Any interested member of the Graduate Faculty may also participate in the oral examination. However, only members of the thesis committee will be allowed to vote. At least two weeks following a successful oral examination, the student will be expected to schedule a public thesis defense. The student must present the completed thesis to the committee no later than one week prior to the public thesis defense date.

11. M.S. Recommended Degree Schedule

Summer before Classes Start

- (International Students only) English 5910
- (US students only) Teaching seminar

Semester 1:

- Complete course work, including MOLB 5600, MOLB 5050, MOLB 5051 and one of the advanced MOLB core courses if the student has already taken biochemistry and molecular biology courses in the past
- Arrange thesis project and M.S. committee near the end of the semester.
- Submit Program of Study to Graduate Program Chairperson and Office of Registrar before the end of the semester.

Semester 2:

- Complete course work, including MOLB 5610, MOLB 5051 and one of the advanced MOLB core courses.
- Submit Research Proposal by one month following completion of second semester.
- Schedule oral defense of Research Proposal, not more than 90 days after submission of proposal

Semester 3 and Beyond:

Continue research, course work and teaching in subsequent semesters.

Final Semester:

- Arrange thesis committee meeting prior to commencing writing or at least 3 months prior to anticipated date of defense of thesis.
- Submit Graduation/Title form to Office of Registrar by due date in final semester (check schedule) and do a program check.

- Present draft of thesis to committee no later than 3 weeks prior to scheduled defense date.
- Submit completed thesis to committee members no later than 2 weeks prior to scheduled public defense date.
- Present public seminar and final defense of thesis following successful completion of the oral exam by at least 2 weeks.
- Submit official "Completion of Requirements" form to Office of Registrar by due date for that semester. (Forms are in main office.)
- Submit copy of thesis to Department of Molecular Biology collection.