"PLAN B" MASTERS IN MOLECULAR BIOLOGY
UNIVERSITY OF WYOMING

Students wishing to pursue a Plan A Masters of Science (MS) in Molecular Biology should visit the Department of Molecular Biology web site:

http://uwacadweb.uwyo.edu/UWMOLECBIO/

The Doctor of Philosophy (PhD) graduate program for the Department of Molecular Biology is administered through the Molecular and Cellular Life Sciences Graduate Program:

http://www.uwyo.edu/MCLS/

Intent of the Plan B Masters in Molecular Biology Program

This one-year program is designed to serve students who have, usually, one of the following goals:

(a) Creation of a flexible post-baccalaureate educational experience to prepare them for specific career objectives.
(b) Enhancement of their *curriculum vitae* in order to increase the probability of admittance to PhD or Professional School programs.
(c) A terminal degree in molecular biology to facilitate a career as a laboratory technician in an industry or academic laboratory setting.

In comparison to the Plan B Masters program, the Plan A Masters of Science (M.S.) and Doctor of Philosophy (Ph.D.) programs provide a research-intensive educational experience. However, all individual Plan B Masters candidates will be required to include a significant research component in their Program of Study.

Students who pursue a Plan B Masters degree in Molecular Biology are not guaranteed admittance to the MCLS Ph.D. program, nor will their research effort in the Plan B Masters program be credited as effort towards a Ph.D. in a program that they might subsequently enter.

Funding of students pursuing a Plan B Masters in Molecular Biology

No departmental funds will be used to support students in the Plan B Masters program. Students are expected to be self-funded unless specific arrangements for funding have been made with the faculty member acting as the advisor and mentor. Prospective foreign students must satisfy the financial standards of the graduate school prior to being granted admittance to the program. A student may be able to obtain financial support from the graduate school by applying for a Graduate School Scholarship or Minority Scholarship or other award from the Office of Educational Opportunities.

Application and Assignment of Advisor/Mentor

Potential Plan B Masters students are considered for admission only after they establish an agreement with a specific adviser that he or she agrees to advise that student if the student is admitted to the program. The Graduate Chairperson should be notified in writing by the student's prospective adviser of their willingness to advise the student's Plan B Masters project.

After identifying a suitable mentor, the candidate must file an application through the graduate school (http://uwadmnweb.uwyo.edu/UWGrad/applynow.asp). After the identification of a willing mentor and submission of an application, both the graduate school and the Department of Molecular Biology Graduate Admissions Committee will assess the prospective student's qualifications and potential.

PROGRAM DETAILS

1. Program Of Study

After consultation with the student's adviser and the Graduate Program Chairperson, and with consideration of academic background and research interests, students will devise a Program of Study before the end of their first semester in the program. Students are expected to complete a Plan B Masters program in one full year, although individual circumstances may require additional time. A student must successfully complete a minimum of 30 hours of credit, 17 of which must be in the student's major field.

Requirements for fulfilling 17 specified credit hours of the 30-hour requirement:

- 6 CH 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 11 of the 30 hour-requirement will be specified.
- 2 CH of seminar presentation courses MOLB 5050 (1 cr of MOLB 5050 must be taken the first semester a student enrolls).
- MOLB 5051 and MOLB 5052 credits: students are required to register and attend the departmental seminar (MOLB 5051 or MOLB 5052 in the summer) each semester.
- 6 CH earned in Advanced Problems in Molecular Biology (MOLB 5520-01). An approved internship experience can substitute, totally or in part, for the research experience. Such an internship would be accounted for under MOLB 5520.
- 3 CH earned in an advanced molecular biology lecture course, such as MOLB 5440, MOLB 5450, or MOLB 5460.

Recommendations for fulfilling the 13 remaining CH of the 30-hour requirement:

- Other advanced molecular biology courses and lab pods.

- MOLB 5010 (total univ. max. 6 CH per degree program); 5520-01 CH (total univ. max. 10 credits per degree program).
- Courses specific to the individually tailored educational goals (e.g. – business, law, philosophy, chemistry, organismal biology, etc.)

2. Transfer Credit

No more than 9 semester hours that have been transferred from another accredited institution may be used for meeting the credit hour requirements of a Masters student's program. Transferred hours must carry a B or better grade. Transferred credit will be subject to the approval of the appropriate major professor and the Dean of the Graduate School and must be completed prior to approval of a masters degree program for which the credit is to apply.

3. Plan B Masters Committee

The student's major professor will serve as chairperson of the student's committee unless the major professor is not a member of the Graduate Faculty. In this event, a chairperson shall be chosen from among the Graduate Faculty by the major professor and the student involved and the major professor may serve as a co-chairperson of the committee. The remaining committee members (at least two) will be recommended jointly by the major professor 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.

4. Evaluation of Satisfactory Degree Progress

The Graduate Program Chairperson in consultation with the student's adviser will evaluate satisfactory progress during a student's first semester in course work. The adviser and Plan B Masters Committee will do additional evaluations. Unsatisfactory progress may lead to dismissal from the Graduate Program.

5. Research Paper

Each Plan B Masters student must present a paper or based on a laboratory experience. The paper should present the results of a study of a problem representative of the quality, but not the range, of a thesis submitted under the Masters of Science program. The student and adviser design the format of the Plan B Masters paper. A Plan B Masters paper is not filed in Coe library and is not submitted to the Graduate School; instead, it is filed in the Department of Molecular Biology.

6. Examination

Before the Final Examination, the student is required to review the proposed content of the paper with the student's 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 Plan B Masters paper should be presented to the student's committee at least 2 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.

The student's final comprehensive exam will include a public seminar to be followed by an oral examination by the student's committee. The oral exam, in addition to examining the student's paper, will test the candidate's general competence in the fields in which he or she is working and may cover both his or her undergraduate and graduate courses in these fields.

7. Plan B Masters Degree Recommended Schedule

Semester 1:

- Arrange meeting with Graduate Program Chairperson to review course plan.
- Complete course work including MOLB 5600, MOLB 5050, MOLB 5051, and one of the advanced MOLB core courses (MOLB 5440, 5450, 5460) if you have already taken biochemistry and molecular biology courses in the past.
- Research project work (enroll in MOLB 5520-01 for 3 CH).
- Arrange Plan B Masters committee.
- File Program of Study with Graduate School.

Semester 2:

- Complete course work including MOLB 5610, MOLB 5050, MOLB 5051 and other courses.
- Research project work (enroll in MOLB 5520-01 for 3 CH).
- Work on research paper.

Final Semester (usually the second semester, but may on occasion be the third):

- 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 grad school by due date in final semester (check schedule) and do a program check with grad school.
- Present draft of research paper(s) to committee 2 weeks prior to scheduled defense date.
- Present public seminar followed by final defense.
- Submit official "Completion of Requirements" form to grad school by due date. (Forms are available at the Graduate School's website).
- Submit a copy of the final thesis or research papers to the Department of Molecular Biology collection.