

# Microbiology and Molecular Genetics Accelerated Master's Graduate Program Guidelines

To provide an environment of scholarship, integrity, research, and teaching excellence that will assist students in acquiring the knowledge and skills necessary to excel as professional scientists and educators.

## Overview

The Microbiology and Molecular Genetics Accelerated Master's (AMS) Program strives to admit academically strong students and educate them for successful careers based on a science foundation. To achieve these goals, didactic course work, an independent literature review, and oral presentation are required for graduation.

## Admissions

Admissions are made through the OSU Graduate College with referral to the Microbiology and Molecular Genetics Department. The OSU Graduate College guidelines are to be followed for admissions. The Microbiology & Molecular Genetics Department makes the final selection of AMS applicants to be admitted. Individuals may submit applications all year, but all admissions are made for the Fall semester. The selection process considers GPAs (undergraduate and/or Master's), GRE scores, and recommendation letters (At least 3 letters are required).

# **AMS Requirements**

## A. Graduate Study

**Advising.** In the first semester, the Graduate Coordinator will advise the student on course selection and serve as the initial instructor for Special Problems (MICR5990) until an advisor has been chosen. During this semester, the student will find a faculty member within the department who is willing to serve as their Independent Literature Review advisor, and this information will be communicated to the Department Head and the Graduate Coordinator in writing. All AMS students must formulate a Literature Review Committee. This will include their advisor and a second faculty member to serve as a reader.

Guidelines for Independent Literature Review. It is the student's responsibility to complete reports regarding their progress on the Independent Literature Review after each semester (i.e., Fall, Spring, Summer). The student is encouraged to work with their advisor during all three semesters to ensure report completion. These reports should be submitted to the Graduate Coordinator and Literature Review Committee. In addition, the Literature Review Committee will review the student's academic performance and their progress in the independent literature review preparation at the end of each semester. Academic performance will follow the Graduate College guidelines.

Unsatisfactory progress by the student will result in the student being placed on probationary status. The Literature Review Committee will notify the student of their probationary status in writing. Should the student's independent literature review continue to be unsatisfactory after the next semester

(Spring), the student will be dismissed from the program. This decision will require written notification from the committee.

## **B. Required Course Work**

The AMS Degree in Microbiology & Cell and Molecular Biology requires a total of 32 credit hours. This includes an Independent Literature Review for which 8 credit hours will be given as MICRO 5000/5990. The student will also take the 4 core courses in the areas of Microbiology (MICR 6163), Cell Biology (MICR 6263), Cell Physiology (MICR 6213), and Pathogenesis (MICR 5273). During both Fall and Spring semesters, students are also expected to attend both the departmental journal club (MICR6120) and the departmental seminar (MICR5160), even if they are not taking these two activities for credit. Attendance is recorded during these activities. AMS students are required to take the departmental journal club (MICR 6120) for credit at least once, and during that semester (either Fall or Spring), they need to present a research paper. Students may also elect MICR 6120 for a second semester. The remaining credit hour requirements can be filled by approved electives. Typical semester plans are as follows:

#### **Fall Semester**

3 credit hrs Quantum Microbiology MICR 6163 (Microbiology) 3 credit hrs Microbial Pathogenesis MICR 5273 (Pathogenesis)

3 credit hrs Special Problems MICR 5990 1 credit hrs Journal Club MICR 6120

5 credit hrs Electives 15 Total Credit Hours

### **Spring Semester**

3 credit hrs Cell Signaling and Gene Reg. MICR 6263 (Cell Biology)

3 credit hrs Microbial Ecology MICR 6213 (Cell Physiology)

3 credit hrs Special Problems MICR 5990 1 credit hrs Journal Club MICR 6120

5 credit hrs Electives 15 Total Credit Hours

#### **Summer Semester**

2 credit hrs Special Problems MICR 5000

3 credit hrs Electives 5 Total Credit Hours

Some approved electives are listed below:

Non-zero ending MICR courses at the 5000 level or above Non-zero ending BIOC courses at the 5000 level or above

ZOOL 4215\* (\*taken for graduate credit)

ZOOL 5283 BIOL 5524

AMS students must maintain a GPA of 3.0 or better throughout the program. If a student earns a C or worse, they will immediately be placed on academic probation for the remainder of their graduate program. A student may appeal the probationary status prior to the start of the next semester.

Students on academic probation who earn a C or lower in the next semester will be dropped from the program.

# **Other General Guidelines**

#### A. Enrollment

Full-time enrollment for graduate students, as determined by the Office of the Registrar, is considered to be 9 or more credit hours in the fall and spring. For summer, students must enroll in a minimum of 4 credit hours. Students must enroll in at least 2 credit hours during the semester in which they take their final examination or meet other requirements. They must also be enrolled in at least 2 credit hours during the semester in which they graduate.

## **B.** Academic Integrity

Professional integrity is essential for the progress of education, academics, and science. There will be no tolerance for academic dishonesty or misconduct, including plagiarism, cheating, or any other form. Students may refer to the Academic Dishonesty or Misconduct section in the OSU catalog and the Student Rights and Responsibilities Governing Student Behavior document (available from the Vice President of Student Affairs) for clarification.

#### C. Graduation

All requirements must be completed within seven years, calculated from initial enrollment in the program. No course on the Plan of Study may be more than 10 years old at the time of graduation. Students must file a diploma application at the beginning of the semester in which they are expecting to graduate. If they fail to graduate during that semester, a new diploma application must be filed.

# D. Required Safety Training

All graduate students must receive quarterly safety training. If students are unable to attend the required safety training seminar each semester, then they must receive other approved safety training. Students should consult with the departmental office or their adviser for ways to receive alternative training. All graduate students must receive sexual harassment training. Students should contact the departmental office to sign up for training.

#### E. Appeals Process

Since the Accelerated Master's Program is completed in 12 months, the normal graduate students' appeals process is modified. Student may appeal their probationary status after the first semester or before the start of the second semester. Appeals are made to the Graduate coordinator and committee. Time extension requests to complete the program require approval by the department.