

# Graduate Study in the Department of Developmental and Molecular Biology Policy

(All Graduate Students, regardless of area of interest, matriculates into the Graduate Division of Biomedical Sciences and are governed by the Graduate Division Academic Policies)

# I. Purpose

The purpose of this document is to state the policies for graduate study toward the PhD within the Department of Developmental and Molecular Biology (DMB), with the aim of providing students with the best possible training for pursuing successfully their individual research and career goals. In addition, these policies are designed to promote an actively engaged and cooperative relationship between faculty and students and to foster an interactive scientific environment. These policies have been agreed upon by the majority of faculty members of the Department, and will be reviewed periodically upon request.

# II. Scope

This policy applies to all DMB PhD and MSTP students.

## III. Policy

- A. Coursework
- 1. <u>PhD Students</u>:

Required courses: Biochemistry (Block 1; 5 credits) Molecular Genetics (Block 1; 5 credits) And: either Gene expression beyond the double helix (Block 2; 5 credits) or Molecular Cell Biology (Block 2; 5 credits)

**Electives:** According to requirements of the Graduate Division, students must take a minimum of courses equivalent to 21 course credits. DMB students thus must take additional graduate courses acceptable to their mentor and/or Advisory Committee equivalent to at least 6 credits. Exceptions to DMB required course composition may be granted based on the approval the Chair of the Department.

**Note**: First year students are required to take at least six (6) credit course equivalents per block. Furthermore, students with any failing grade (F) or unsatisfactory grades in Thesis Research are reviewed by the Graduate Division Academic Affairs Committee.

2. <u>MSTP Students:</u>

According to requirements of the Graduate Division, MSTP students must take courses equivalent to 18 credits.

## **Required courses:**

MSTP students are required to take Biochemistry (Block 1; 5 credits) And, in addition, to select courses equivalent to 10 credits from the following: Molecular Genetics (Block 1; 5 credits) Gene expression beyond the double helix (Block 2; 5 credits) Molecular Cell Biology (Block 2; 5 credits)

**Electives:** MSTP students must take additional graduate courses acceptable to their mentor and/or Advisory Committee equivalent to at least 3 credits. Exceptions to DMB required course composition may be granted based on the approval the Chair of the Department.

- B. Additional responsibilities of the graduate student in DMB:
- 1. DMB Work in Progress presentations. It is expected that each student will attend the weekly WIPs and present a WIP seminar approximately once per year.
- 2. Students must attend all Departmental seminars and the Friday noon WIP. Students are expected to remain and participate in question/answer periods at these events, and to attend relevant non-departmental seminars.
- 3. Journal Clubs. Each DMB student must fully participate in a departmental or equivalent journal club (such as liver center or stem cell journal clubs) and inform the DMB office about their selection. Attendance of graduate students will be monitored.
- 4. Students are encouraged to present data at scientific meetings. Some Institutional funds may be available to support costs. After a meeting, posters should be displayed outside of the laboratory in the hallway, indicating the meeting attended.
- 5. Students performing rotations are expected to spend as much time as possible in the laboratory.
- C. The Qualifying Exam.
- 1. PhD students will take the qualifying exam towards the end of their first year (as will be detailed by the graduate office; typically, May through June). The exam period for MSTP students is during their 3rd year in the program (typically May through June).
- 2. DMB requires an independent third aim based on an idea of the student that has not been discussed with a faculty member. This aim should be marked with an asterisk.
- D. Thesis Topic Presentation.
- 1. Early in the academic year following successful completion of the Qualifying Exam, the student will give a thirty-minute presentation to the Department of his/her current thesis project, followed by a question/answer period as part of the normal WIP series. Accordingly, an abstract of the research proposal will be distributed to the DMB students, faculty, and postdocs prior to the WIP presentation.
- E. Student Advisory Committee Meetings (SAC).
- 1. Starting in the second year and every year thereafter, it is required that each student meet with the SAC at least once per academic year until completing the Thesis. As of year 4, the SAC and the student meet at least twice per year. The SAC will consist of at least three Einstein faculty, two of

whom, including the PI, must be from DMB. It is the student's responsibility to arrange the SAC meetings. This will provide a basis for discussion at the Advisory Committee meeting.

- F. The Thesis.
- 1. Successful completion of the research and permission to prepare the dissertation requires the agreement of the SAC. Research carried out to complete the thesis requirements must have resulted (or be believed by the SAC to eventually result) in at least one significant first-author publication. Once agreed upon by the SAC, the student will determine a Thesis Defense Committee and proceed with the Dissertation as outlined in the Graduate Division Academic Policies and Guidelines. The format of the thesis has to be agreed on by the student, the PI, and the SAC. Generally, DMB strongly recommends Format A (see Thesis and Defense Guidelines at <a href="https://einsteinmed.edu/uploadedFiles/education/phd/thesis\_guidelines\_r.pdf">https://einsteinmed.edu/uploadedFiles/education/phd/thesis\_guidelines\_r.pdf</a>). At least one member of the Thesis Defense Committee should be from another Department within Einstein. It is expected that one member of the Thesis Defense Committee will be invited from an institution outside Einstein. Exceptions need to be approved by the DMB faculty.

# G. Appendix to the Graduate Division policies:

Appendix I. Department Specific Course Requirements and Course Recommendations

IV. Developmental and Molecular Biology

#### 1. <u>PhD students:</u>

#### **Required courses:**

Biochemistry (Block 1; 5 credits) Molecular Genetics (Block 1; 5 credits) And: either Gene expression beyond the double helix (Block 2; 5 credits) or Molecular Cell Biology (Block 2; 5 credits)

## 2. <u>MSTP Students:</u>

#### **Required courses:**

MSTP students are required to take Biochemistry (Block 1; 5 credits) And, in addition, to select courses equivalent to 10 credits from the following: Molecular Genetics (Block 1; 5 credits) Gene expression beyond the double helix (Block 2; 5 credits) Molecular Cell Biology (Block 2; 5 credits)

# IV. Definitions

N/A

# V. Effective Date

Effective as of: February 16, 2021

#### **Policy Management and Responsibilities** VI.

Einstein's Division of Graduate Studies is the Responsible Office under this Policy. Einstein's Executive Dean is the Responsible Executive, and Einstein's Associate Dean for Graduate Programs is the Responsible Officer for the management of this policy.

#### VII. Approved (or Revised)

E.R.r

2/25/202/ Date

Responsible Executive