Miami University

Department of Biology Guide to Graduate Studies

For students in Biology Department affiliated graduate programs

(Biology, Botany, CMSB, EEEB)

Revised September 2025

Department of Biology Guide to Graduate Studies

Miami University

For Graduate Students in the Biology and Botany Graduate Programs

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The following requirements and procedures of the Biology department are supplemental to the published requirements of the Graduate School; see Graduate School online policy library for graduate students: https://miamioh.edu/policy-library/students/graduate/index.html. Final responsibility for compliance with the formal procedures required for the Master's or Doctoral degree rests with the student.

A. Requirements for Admission to Graduate Programs

General admission requirements

To be admitted to the graduate degree programs in the Biology department, students must meet the minimum standards of the Graduate School (https://miamioh.edu/graduate-school/index.html). In addition to their formal application to the Graduate School, an applicant must have three letters of recommendation, and a personal statement outlining the student's professional goals and area of research interest. At least one research advisor must be identified and be willing to accept the applicant prior to acceptance into the program. The Test of English as a Foreign Language (TOEFL) or International English Language Testing System (IELTS) is required of all foreign applicants from non-English speaking countries.

Minimum background preparation

Degree applicants should have a broad course background in the biological sciences, chemistry, physics, and mathematics or statistics. Deficiencies are to be made up by a method determined by the student's graduate committee. This may take the form of additional undergraduate course work or directed readings.

Master's bypass

After entering into a MS program, a student may apply to bypass the M.S. degree and be admitted to aPh.D. program. To bypass, students must be in their third semester of graduate work with at least a 3.0 grade point average (G.P.A.). The student will provide their committee with a personal statement justifying their request and detailing evidence of their potential to complete a Ph.D. degree. If the student's committee approves the request, they will inform the Graduate Advisor of their degree program, and submit Form BP (see appendix) signed by their committee to the Biology office for their file. The student then files for a degree change (to the appropriate Ph.D. program) with the Graduate School (Form G-3: https://miamioh.edu/graduate-school/faculty-staff-resources/forms-and-publications.html). The Graduate Advisor for the appropriate degree program approves the change. Students should submit applications before the end of their third academic semester to formally be admitted to the Ph.D. program in their fourth semester. (See form BP in Appendix C.)

B. Graduate Student Support

Time limits for financial support

Students in good standing are eligible for financial support:

a) M.S. – 2 years
b) Ph.D., student enters program with M.S. – 4 years
c) Ph.D., student enters program without M.S. – 6 years

Graduate students, with the support of their advisors, may petition for an extra one or two semester(s), which is reviewed by the Graduate School. Petitions are made by filling out the G-1 form: https://miamioh.edu/graduate-school/faculty-staff-resources/forms-and-publications.html.

More information on Graduate Assistantships and Fellowships may be found on the Graduate School website (https://miamioh.edu/graduate-school/admission-funding/funding-awards).

Graduate School Summer Research Fellowships
The purpose of the Graduate Summer Research Fellowship is to provide financial support for eligible full-time graduate students to engage in meaningful scholarly activities during a 6-week summer period. The awarding of these fellowships is competitive and subject to the availability of funds.

Thesis Master's students are eligible for a total of two years of summer support; Ph.D. students are eligible for a total of four years of summer support including their years as Master's degree candidates. Students must apply each year and this funding is not guaranteed. Please see details on eligibility requirements on the Graduate School's website (https://miamioh.edu/graduate-school/admission-funding/funding-awards/grad-summer-research-fellowship.html). Students MUST apply for the Fellowship no later than Feb 1 to be considered (the Graduate School will not award Fellowships to those who miss this deadline). Furthermore, the GAC must provide a ranked list of eligible students to the Graduate School. The priority for this ranking are: 1) First year or Not; 2) Good Standing or Not; 3) Productivity (# publications that year + external presentations + grants + served as mentor for 1 or more undergraduates).

Petitions, Transfers, and Withdrawals
Information and forms for Graduate Student Petitions, Transfer credits, Change of Major/Degree, and Withdrawal can be found on the Graduate student website:
https://miamioh.edu/graduate-school/faculty-staff-resources/forms-and-publications.html

C. Choice of Permanent Advisor and Formation of the Advisory Committee

Selection of the advisor
As early as possible, but no later than the beginning of the second semester of residency, students are expected to select a major advisor (or co-advisors) and confirm that the major professor is prepared to direct their research program. However, the major advisor is usually selected during the admissions process, and students will often have a major advisor identified when they start their program. The major advisor is expected to serve for the entire course of the student's program. If necessary, the Departmental Chair or the Chair's designate will serve as the student's advisor until a major professor is selected,

Rotation policy
For students opting to rotate, a temporary advisor may be identified along with up to two additional potential advisors, each of whom would be willing to accept the student into their lab. In this case, the student may participate in a mutually agreed upon rotation system among the potential advisors for a period no longer than the first semester in residence (e.g. ~6 weeks per lab for two rotations). At the end of the rotation period, an advisor or co-advisors should be identified by mutual agreement within the rotation group to serve the remaining course of the student's program.

Graduate Committees
Master's and Doctoral advisory committees will be formed in consultation with the student and his/her research advisor, subject to approval by the Chair of the GAC, by the end of the 1st semester in the program. The graduate committee is expected to meet at least once per year, which may include approving the course of study, providing guidance on the development of the thesis/dissertation research proposal, discussing academic and research progress, and administering the comprehensive examination

and final defense. A record of the dates and agenda topic for each meeting should be maintained in the student's departmental personnel file (form G-1, Appendix B).

The Master's advisory committee is composed of at least three Miami University faculty members (at least two from the Biology department) of appropriate graduate level and is chaired by the major advisor.

The Doctoral advisory committee is composed of at least five Miami University faculty members of appropriate graduate level and is chaired by the major advisor. At least two of these faculty are from the Biology department and one individual from a different department serves as the Graduate School Representative on the committee.

The research advisor and the Graduate School Representative must hold Level A Graduate Status. Adjunct faculty members with Level B Graduate Faculty Standing can serve in any capacity except as advisor or the Graduate School Representative. Any individuals external to Miami University that do not hold Level B Graduate Status will be appointed to this committee in an *ex officio* capacity.

Having a respected scholar or professional from another institution serve on a graduate examination committee can be very valuable. Therefore, an off-campus scholar who meets the criteria defined in the policy "Determining Levels of Graduate Faculty Standing" section "Level B and Level C Graduate Faculty Standing", and who is nominated by the department chair may serve as a voting member of a comprehensive and/or final examination committee for an individual graduate student. Off-campus scholars serve in addition to the minimum required number of Miami University Level A or Level B members of the Graduate Faculty.

Doctoral advisory committee members must be approved by the Dean of the Graduate School at least 10 business days prior to administration of the comprehensive (GS Form D-1) and again 10 business days prior to the doctoral final examination (GS Form D-3). Both forms should be submitted online and can be found on the Graduate School website: https://miamioh.edu/graduate-school/faculty-staff-resources/forms-and-publications.html.

D. Graduate Student and Advisor Obligations

Biology Department Diversity Statement

In the Department of Biology, fostering a welcoming environment for all members of our community is at the very core of our mission. We value diversity and are deeply committed to create a place where persons of all identities thrive to learn and discuss biology and beyond. We also recognize our responsibility to continue to actively reject ideas and forces that disvalue diversity and inclusion, and to work our hardest to promote diversity in our program. As biologists, we know that diverse groups bring a wide variety of valuable perspectives, which is indispensable in teaching, learning, research, and science communication. We endeavor to actively engage in positive behaviors to achieve our goals and build confidence and competencies in our students, with our staff, and among our colleagues to contribute positively to society.

Expectations for Students

Throughout their tenure in the graduate program, graduate students will be participating in a variety of activities, including taking classes, teaching laboratories, and making progress on their research projects. While graduate students are expected to perform all activities satisfactorily, it should be emphasized that research progress is a priority because students are earning a research-focused degree. Thus, graduate students should be continually making progress on their project during semesters that they are involved in teaching and course taking. In addition, winter semesters (i.e., "J-term") and summers are critical times

for students to work intensively on their projects without other distractions. Students are expected to be present in their labs/offices working on lab experiments or writing manuscripts during the J-term and summer. A student is not allowed to take on unapproved employment or other commitments, including other degree programs, or enroll in courses not approved by their major professor.

The Graduate School has implemented tight timelines for Master's students to finish their thesis projects within 2 years and Doctoral students to finish their dissertation projects within 6 years. Retention and renewal of graduate assistantships and continued enrollment in the Biology Department graduate programs are predicated on maintaining good standing.

Definition of Good Standing

To maintain good standing, Graduate students must meet all requirements set forth in the Miami University policy library (https://miamioh.edu/policy-library/students/graduate/index.html), and in addition Biology Department graduate students must:

a) have a major professor, a graduate committee, and an approved program of study;
b) have a cumulative G.P.A. of at least 3.0;
c) perform satisfactorily in their research (as assessed by the primary advisor and/or the thesis/dissertation committee);
d) perform satisfactorily in their teaching duties (as assessed by the Department Chair);
e) successfully complete all coursework, and milestones such as comprehensive exam and proposal defense on schedule, according to program requirements;
f) and be professional and collegial members of the department including exhibiting professional behavior towards officemates, classmates, labmates, faculty and staff, and following the Code of Student Conduct in Miami University's Policy Library (https://miamioh.edu/policy-library/students/student-code-of-conduct/code-of-conduct.html).

Review of Good Standing

Good standing status is reviewed by the Biology Graduate Advisory Committee (GAC) each year and the GAC makes recommendations to the Chair regarding students who may not be meeting a status of good standing. Student progress and standing in their graduate program will be reviewed by the GAC. In addition, the primary advisor, members of the thesis/dissertation committee, or any faculty may bring any student up for review by the GAC at any time by providing a written statement outlining specific concerns. The student will receive a written statement from the GAC outlining these concerns, and the student will be given an opportunity to provide a written response. The GAC will then review the concerns and, if the student is found to not meet one or more requirements for good standing, will recommend a course of action to the Chair. Students who do not meet one or more of the requirements for good standing may be recommended a reasonable period of time to address deficiencies and will be reviewed again following that time period. However, in the case of egregious lack of duty, immediate termination can be recommended. The Chair will make the final decision as to the course of action and inform the student in writing with reasons described. The chair's decision will recognize that the identification of a new faculty advisor or continuation of an existing advisor is by mutual agreement between the faculty member and the graduate student. Terminated students have the opportunity for a hearing with the Associate Provost and Dean of the Graduate School.

Advisor Obligations

Advisors must follow the statements of good teaching practice and professional conduct as described in the Miami University policy library (Academic Responsibilities and Academic Grievance; https://miamioh.edu/policy-library/students/graduate/graduate-academic-regulations/academic-responsibilities-and-academic-grievance.html). Advisors are expected to treat students with courtesy and respect and without prejudice at all times. Advisors are allowed to respectfully critique a student's academic errors or research responsibilities and performance. Advisors should make research performance expectations clear to their advisees and review their performance on a regular basis. Advisors who feel students are not meeting expectations in light of these reviews, should communicate in writing to their students that they are not meeting performance standards. If the advisor wishes to terminate their sponsorship of a student, they will submit their specific concerns to the GAC in writing. The student will receive a written statement from the GAC outlining these concerns and the student will be given an opportunity to provide a written response. The GAC will evaluate the specific concerns of the advisor and the student's written response and recommend a course of action to the Chair. The Chair will make the final decision as to course of action and inform the student in writing with reasons described. The chair's decision will recognize that either the identification of a new faculty advisor or continuation with the existing advisor is by mutual agreement between the faculty advisor and the graduate student.

Addressing Advisor Concerns and Changing Advisors

Students should expect to be able to respectfully critique their advisor with an aim at improving their learning experience and their advisor should have the opportunity to address such concerns. Alternatively, a student may also bring their concerns to a member of the GAC, the Chair, or the Biology Graduate Student Association (BIO-GSA). These concerns may result in a mediated conversation with the Advisor and either a GAC representative or the Chair and a written plan for both student and advisor expectations moving forward.

In the case that a reconciliation between the student and advisor cannot be met and the student wishes to switch advisors during their program, they must submit their specific concerns to the GAC in writing. The advisor will receive a written statement from the GAC of the specific concerns and the advisor will be given an opportunity to provide a written response. The GAC will evaluate the specific concerns of the student and the advisor's written response and recommend a course of action to the Chair. The Chair will make the final decision as to course of action and inform the student in writing with reasons described. If the student is determined to be in good standing by the Chair in consultation with the GAC (see above), they may be given the opportunity to identify a new advisor that agrees to sponsor them before the start of the next full semester to continue receiving further financial support from the department. Note, students do not own the data they generated prior to changing advisors. Unless they receive approval in writing from their previous advisor, students are expected to change research projects when they choose a new advisor. The degree of progress a student has made should be considered in making this decision, including the potential for completed chapters or manuscripts to be used in the student's dissertation.

Reporting Suspected Harassment or Discrimination

It is the responsibility of every instructor to ensure that the learning environment is free from all forms of prejudice that negatively influence student learning, such as those based on age, ethnicity, gender, mental or physical impairment, race, religion, sexual orientation, or gender identity. If the student believes they are a victim of harassment or discrimination (a Title IX violation), they may report this behavior directly to the Office of Equity and Equal Opportunity (OEEO) who will investigate the accusation. Alternatively, they can report to the chair of the GAC or department Chair who must promptly inform the OEEO. All alleged violations will be investigated by the OEEO. See the University Title IX Protocol-Sexual Misconduct Policy and Procedures for Students in the Miami University Policy Library (https://miamioh.edu/policy-library/students/undergraduate/health-safety/title-ix-protocol-sexual-misconduct-policy-procedures-for-students.html). Students can also reach out to the Graduate Student Rights and Responsibilities Committee to receive counsel from their peers about the rights and responsibilities they have as graduate students.

Student Academic grievance policy

In the context of a course, if a student feels an instructor or faculty has violated the Statement of Good Teaching Practices (See the Miami University policy library [Academic Responsibilities and Academic Grievance; https://miamioh.edu/policy-library/students/graduate/graduate-academic-regulations/academic-responsibilities-and-academic-grievance.html]), they should first meet with the course instructor or faculty member to voice a complaint and to receive an explanation and possible redress. If the student is not satisfied with the explanation, they should confer with the Department Chair. At that point, the student may either ask for a grade review or charge the instructor with a violation of the Statement of Good Teaching Practices and utilize the department grievance procedure with the option to appeal any decision at the Divisional level. The full academic grievance procedure is outlined in the Miami University policy library (Academic Responsibilities and Academic Grievance; https://miamioh.edu/policy-library/students/graduate/graduate-academic-regulations/academic-responsibilities-and-academic-grievance.html). Note, issues not covered in the Statement of Good Teaching Practices should be discussed with the GAC chair to determine a proper course of action.

E. Graduate Student Milestones

Plan of Study

Students will meet with their graduate committee before the end of their 1st semester to determine their plan of study (Form G-2, Appendix B). This plan of study outlines the expected courses the student will take and when they will take them to fulfill their program requirements. This plan must be approved by the entire committee; subsequent changes to this plan are possible, but subject to approval by the committee.

M.S. Thesis Proposal Defense

A proposal describing the objectives, methods, and expected outcomes of the thesis research to be undertaken must be presented to the student's graduate committee at a meeting of the entire committee. The advisor, in consultation with the committee, will determine the format of the proposal and its presentation. The body of the written research proposal will be 5-10 pages for an M.S. proposal. The document should be written by the student, without use of generative AI. The student will be informed of the committee's format decision prior to beginning the writing of the proposal. The proposal should be submitted to the committee at least 14 calendar days prior to the scheduled proposal defense meeting. If

the proposal is evaluated as requiring revisions, the student will make revisions based on evaluation comments and submit the revisions within an additional 7-day period for evaluation by the graduate committee.

For a student to be in good standing, the M.S. thesis proposal should be presented to and approved by the end of the 2nd semester. The student should reserve 2 hours for the combined presentation and oral defense of their thesis proposal. The advisor, in consultation with the committee and the student, will determine the format of the proposal defense, although typically students will prepare a 15-30 min oral summary/presentation of their proposal to be delivered at the start of the defense with additional time for committee member questions and suggestions. Successful completion of the thesis proposal defense should be recorded by completion and filing of Form G-3 (Appendix B) in the Department office.

Doctoral Comprehensive Exam/Dissertation Proposal

Ph.D. students must pass a comprehensive examination administered by the student's doctoral advisory committee to be admitted formally to candidacy for the doctorate degree. To be in good standing (see above), Ph.D. students must complete the comprehensive exam no later than the end of the 4th semester. The comprehensive exam has a written and an oral component, which will be based on the student's dissertation research and thus Ph.D. students will not have a separate dissertation proposal defense. Students must pass the written examination prior to the oral exam; the oral examination must be completed no later than four (4) weeks after receiving notification that they have passed the written examination and before the end of the semester.

A proposal describing the objectives, methods, and expected outcomes of the dissertation research to be undertaken must be presented to the student's graduate committee. The advisor, in consultation with the committee, will determine the format of the proposal (e.g. NSF, NIH, USDA, EPA) and its presentation. The student will be informed of the committee's format decision prior to beginning the writing of the proposal. The body of the written research proposal will be 10-15 single-spaced pages (not counting literature cited). To successfully complete this milestone on time, it is imperative that students plan to submit their written document to their committee by the beginning of March or October (depending on starting semester in program) of their 4th semester in the program.

The goal of the comprehensive exam is for students to demonstrate their ability to develop a research proposal, including developing a broad conceptual framework based on the scientific literature, addressing research gaps in their field, adequately describing experiments and analyses to address the research questions, and clarifying the proposed impact of the research on the field in general.

<u>Learning Objectives/Goals of PhD Comprehensive Exam</u>

1) Develop a broad conceptual framework based on the scientific literature
    a) Understands subject matter and pertinent literature
    b) Explain concepts and/or theories related to their field of science
2) Address research gaps in their field
    a) Develops testable hypotheses and/or predictions
3) Adequately describe experiments and analyses to address the research questions
    a) Writing/Responses/presentation draw(s) from knowledge in several disciplines
    b) Responses reflect critical thinking skills
    c) Displays/presents creativity and insight
    d) Describes the proposed impact of the research on the field
4) Effectively communicate scientific information in written and oral format.
    a) Writing is clear and concise
    b) Writing is logically organized
    c) Few grammatical and spelling errors
    d) Documentation is adequate

e) Presentation is logically organized
f) Responses to questions are coherent and complete

Successful completion of the comprehensive exam indicates that a student is qualified to advance to candidacy.

Students must write their proposal independently, without the use of generative AI, but it is expected that it will be based on extensive discussions between the student and advisor regarding all aspects of the research. Further, to fully demonstrate a student's ability to move on to Ph.D. candidacy, students will develop at least one aim that goes beyond ideas already developed in the advisor's lab. Preliminary data is not required, but should be included if acquired. It is recognized that the aims, objectives, or methods of a student's dissertation proposal may change over time; any updates in the proposed research during the course of a student's time in the program should be discussed during annual committee meetings.

After the student has submitted their written proposal, the committee will have 14 calendar days to evaluate the proposal and assign a grade of "Fail," "Revisions Required," or "Pass." At the end of the 14-day evaluation period, the Chair of the Doctoral Advisory Committee will summarize the results of the evaluations and distribute them to the remainder of the Committee for discussion and to approve the result of the evaluations. If the proposal is evaluated as a "Revision Required," the student will be given 14 calendar days to make and submit revisions based on evaluation comments, after which a final grade of "Fail" or "Pass" will be assigned. An evaluation of "Revision Required" would indicate that the ability to develop a research proposal was demonstrated but there were some shortcomings that can be reasonably addressed in a14-day revision period. A grade of "Fail," would indicate that one or more abilities were entirely lacking or had significant shortcomings that could not be addressed by revising the current document. A failure of the written component of the comprehensive exam will be documented on Form D-2 and submitted to the graduate school. Students who fail the written portion after submitting a revision may be given permission by their Doctoral Advisory Committee to repeat the exam during their 5th semester. This will require a complete re-writing and submission of their proposal and constitute a second attempt.

Once a student has received a final grade of "Pass" on the written component of the comprehensive exam, they may proceed to the oral component, which must take place within 4 weeks of passing the written component. The format of the oral component of the comprehensive exam shall be determined by the Doctoral Advisory Committee in consultation with the student and will be moderated by the student's research advisor. Typically, students will prepare a 15-30 min oral summary/presentation of their proposal to be delivered at the start of the exam, with time for committee member questions and suggestions. As part of the exam, student's mastery of the theory and methodological approaches in their proposed course of research will also be evaluated.

The oral exam will be conducted in Executive Session (i.e., no public observers may participate) and students should reserve 3 hours for the combined presentation and exam. At the completion of the exam, the student will be excused from the room and the Committee will discuss and vote on an evaluation of the performance on the oral exam as a "Fail" or "Pass." If a student has already failed the written component, there is only one attempt allowed at the oral exam. Students who fail the oral defense, but did not fail the written component, may be given permission by their Doctoral Advisory Committee to repeat the oral exam. This will constitute a second and final attempt. If either portion of the exam is failed, and a second attempt is permitted by the committee, the second attempt should be attempted no later than the 5th semester.

Passage of the written and oral examinations each requires at least four affirmative votes and no more than one dissenting vote. Permission to repeat either the written or oral part of the exam is at the discretion of the student's Doctoral Advisory Committee. A third attempt at either part will not be

permitted under any circumstances. Notification of the results of the proposal defense will be provided to the Department and the Graduate School by completion and submission of Form D-2 (see Appendix C).

Doctoral Departmental Seminar

Ph.D. students are strongly encouraged to present a departmental seminar during their last year (Fall or Spring semester) prior to their dissertation defense or as their final dissertation defense. Students should contact the faculty in charge of the seminar schedule two semesters before they present so that they may reserve a seminar slot for their presentation.

Thesis /Dissertation Preparation and Defense

Preparation of the Thesis or Dissertation

Students should write their thesis or dissertation in accordance with current Graduate School guidelines (Guide for Writing Theses and Dissertations; https://miamioh.edu/graduate-school/student-resources/theses-dissertations.html). It is often desirable to write the thesis or dissertation chapters in the format of a journal in which the work will be published. For the dissertation, it is also desirable to submit one or more manuscripts for publication before the dissertation is completed. The completed thesis or dissertation must be in the hands of the students Graduate Committee 14 calendar days before the date on which it is to be defended. Ph.D. students must also submit online Form D-3, Request for Appointment of Doctoral Final Examination Committee to the Graduate School no later than 14 business days prior to final defense of dissertation (Form link: https://miamioh.edu/graduate-school/faculty-staff-resources/forms-and-publications.html).

Public seminar

As part of their thesis/dissertation defense, students are required to present a public seminar, publicized at least 7 calendar days prior to the defense date. The thesis seminar should be approximately 25 to 30 min, and the dissertation seminar approximately 30 to 45 minutes, not including questions.

Thesis/Dissertation defense meeting and approval

The student should reserve 2 hours (for M.S.) or 3 hours (for Ph.D.) for the combined seminar presentation and formal oral defense of their thesis or dissertation. The student must successfully defend the thesis or dissertation to their Graduate committee in executive session following their public seminar. Barring unforeseen circumstances, the entire committee must be present for the duration of the defense. Substitution of committee members is allowed if absolutely necessary up to 14 calendar days in advance of their defense (which is when the form D-3, Appointment of Doctoral Final Examination Committee, is due to the Graduate School).

For the thesis, passage requires a vote of approval by at least two of the three committee members, with no more than one dissenting vote. Notification of the results of the final examination will be provided to the Department and the Graduate School by completion and submission of the appropriate Graduate School form (GS Form M-1; Appendix B). The final thesis requires the signatures of the major professor and at least one reader (GS Form M-2, also the Thesis title page; Appendix B). This document must be submitted to the Graduate School at least 14 business days prior to commencement.

For the dissertation, passage requires a vote of approval by at least four committee members, and there can be no more than one dissenting vote. Notification of the results of the final defense will be provided to the Department and the Graduate School by completion and submission of the appropriate Graduate School form (GS Form D-4; see Appendix B for Form information). The final dissertation requires the

signatures of the major professor, graduate school representative and at least two readers (GS Form D-5, also the dissertation title page; see Appendix B for Form information). This document must be submitted to the Graduate School at least 14 business days prior to commencement.

Note: A student's advisor and all committee members must give final approval prior to uploading a thesis or dissertation to OhioLink.

The student is required to provide a final PDF file as well as a final printed copy of the approved thesis or dissertation both to the faculty advisor and to the Department in addition to those copies required by the Graduate School.

F. Assessment of Student Progress and Program Assessment

Student Annual Reports
Students will maintain a record of their degree progress and accomplishments as they progress throughout their graduate career. At the end of each year and following the successful defense of their thesis/dissertation, students will fill out an updated progress report. Each student is required to discuss their report with their advisor prior to submission to the GAC. This sheet will be used to assess the student's progress toward success in each of the three learning objectives:(1) Synthesizing current knowledge; (2) Conducting original research; (3) Communicating scientific information.

Program Assessment
Students/advisors will remind committee members to complete student performance assessment rubrics at two milestones in their training: 1) Comprehensive examination (Ph.D. only) and 2) Thesis/Dissertation defense (Ph.D. and M.S.). Committee members are required to complete the rubrics which rank the student's level of achievement in the three learning objectives identified by the department. These forms are submitted electronically here. These rubrics are used to assess the degree to which the graduate programs are effectively training students by the degree to which students, overall, are meeting the program learning objectives, and have no impact on an individual student's degree requirements or pass/fail decisions by their committee.

G. Target Dates for Graduate Student Milestones

Remaining in good standing involves completing milestones for the M.S. and Ph.D. degrees on time. Students are expected to achieve these goals on time to be awarded continued departmental support. Students may complete milestones earlier than listed here with approval of their Advisor and Committee; however, exceptions past these deadlines must be approved by the GAC. Please routinely consult with your advisor and track progress with the checklists below (see detailed checklists pages 12-13).

Year	Semester	M.S.	Ph.D. (with M.S.)	Ph.D. (without M.S)
1	1	Advisor, Committee formed, Plan of Study approved	Advisor, Committee formed, Plan of Study approved	Advisor, Committee formed, Plan of Study approved
	2	Proposal Defense		
2	3	Petition for Bypass[a]		
	4	Thesis defense	Written and Oral Comps	Written and Oral Comps
3	5			
	6			
4	7		(Optional) Departmental Seminar (4th year)	
	8		Dissertation Defense	
5	9			(Optional) Departmental Seminar
	10			Dissertation Defense (Year 5 or 6)
6	11			(Optional) Departmental Seminar (Year 5 or 6)
	12			Dissertation Defense (Year 5 or 6)

[a]If student wishes to switch to a PhD program.

MS program Checklist for Biology Department Students

Year	Semester	Milestone	Date Completed
1	1	€ Courses[a]: o Orientation/Pedagogy workshop (before fall semester) o BIO 601 o Also: Formal course (Typical), BIO 710 (optional), Research hours € **Plan of Study approved** o Identify committee, discuss plan of study with committee=1st committee meeting) o **Form G-2/CMSB-D**[b] submitted to Dept Office (see Handbook; print) o **Form G-1** submitted to Dept Office (see Handbook; print) € Apply for summer fellowship € Annual Progress Report (link will be provided)	
	2	€ Courses[a]: Follow developed plan of study/program specific requirements € **Thesis proposal Defense** (Submit to committee by early March, see Handbook) o **Form G-3** to department (see Handbook, print)	
		Summer: Register for 0 hours of BIO 677	
	3	€ Courses[a]: Follow developed plan of study/program specific requirements € Annual committee meeting o Update **Form G-1** (kept in Dept office) € Apply to graduate, see deadlines here	
2	4	€ Courses[a]: Follow developed plan of study/program specific requirements € **Thesis Defense** o **Form M-1** to grad school (Docusign, Bio Dept initiates) o Committee Members-**Student performance assessment** (online) o Final annual report o **Form M-2** to grad school (Bio Dept submits once all requirements completed) € Petition for year 3 if needed	
		Summer: Register for 0 hours of BIO 677 if August graduation	

[a]See program guide and discuss with advisor/committee. Maintain minimum of 9 credit hours; [b]CMSB different plan of study form

Pay attention to emails from graduate school, grad group directors, grad student listservs!

· Check in with your advisor routinely! · Check your DAR routinely! · You are responsible for being in good standing!

PhD program Checklist for Biology Department Students

Year	Semester	Milestone	Date Completed
1	1	€ Courses[a]: o Orientation/Pedagogy workshop (before fall semester) o BIO 601 o Also: Formal course (Typical), BIO 710 (optional), Research hours € **Plan of Study approved** o Identify committee, discuss plan of study with committee=1st committee meeting) o **Form G-2/CMSB-D**[b] submitted to Dept Office (see Handbook; print) o **Form G-1** submitted to Dept Office (see Handbook; print) € Apply for summer fellowship € Annual Progress Report (link will be provided)	
	2	€ Courses[a]: Follow developed plan of study/program specific requirements	
		Summer: Register for 0 hours of BIO 677	
	3	€ Courses[a]: Follow developed plan of study/program specific requirements € Apply for summer fellowship € Annual Progress Report (link will be provided) € Petition for MS bypass into PhD program (**Form BP**, see Handbook; print)	
2	4	€ Courses[a]: Follow developed plan of study/program specific requirements € **Written/Oral Comps** o =annual committee meeting (unless another needed) o **Form D-1** to grad school (10 days BEFORE exam) (online) o **Form D-2** to grad school (Docusign, Bio Dept initiates) o Update **Form G-1** (kept in Dept office o Committee Members-**Student performance assessment (**online**)** o Change to BIO850 for research hours after successful completion of comps	
		Summer: Register for 0 hours of BIO 677	
3	5	€ Courses[a]: Follow developed plan of study/program specific requirements € Apply for summer fellowship € Annual Progress Report (link will be provided)	
	6	€ Courses[a]: Follow developed plan of study/program specific requirements	
		Summer: Register for 0 hours of BIO 677	
	7	€ Courses[a]: Follow developed plan of study/program specific requirements € Annual committee meeting (at some point this year) o Update **Form G-1** (kept in Dept office) € **If entered with MS**, Apply to graduate, see deadlines here o Check DAR! (9 hrs formal courses; 7 seminars, 30 hrs BIO850) € Apply for summer fellowship € Annual Progress Report (link will be provided)	
4	8	€ Courses[a]: Follow developed plan of study/program specific requirements € **If entered with MS** o **Dissertation Defense** ▪ **Form D-3** to grad school (10 days BEFORE defense) (online) ▪ **Form D-4** to grad school (Docusign, Bio Dept initiates) ▪ Committee Members-**Student performance assessment** (online) ● Final annual report	
		Summer: Register for 0 hours of BIO 677	
5	9	€ Courses[a]: Follow developed plan of study/program specific requirements o Annual committee meeting (at some point this year, if not defending) Update **Form G-1** (kept in Dept office)	

		€ (Optional) **Departmental Seminar** € Apply to graduate, see deadlines here o Check DAR! o 9 hrs formal courses; 7 seminars, 30 hrs BIO850
		€ Courses[a]: Follow developed plan of study/program specific requirements € **Dissertation Defense** o **Form D-3** to grad school (10 days BEFORE defense) (online) o **Form D-4** to grad school (Docusign, Bio Dept initiates) o Final annual report o **Form D-5** to grad school (Bio Dept submits once all requirements completed) € Petition for year 6 if needed
		Summer: Register for 0 hours of BIO 677
6	11	€ See Year 5
	12	€ See Year 5

[a]See program guide and discuss with advisor/committee. Maintain minimum of 9 credit hours; [b]CMSB different plan of study form

Pay attention to emails from graduate school, grad group directors, grad student listservs!

· Check in with your advisor routinely! · Check your DAR routinely! · You are responsible for being in good standing!

I. Requirements for the Biology Department Affiliated Graduate Programs

Master of Science (M.S.) in Biology (30 credit hours)

Course Requirements

Complete pedagogy training during the week preceding your first fall semester in residence, and complete BIO 601 during your first fall semester in residence.

At least three (3) graduate seminars (BIO 601, 650, 710, or equivalent) are required.

A minimum of three (3) graduate level (e.g., 500 or above) courses, of 3 credits or more.

Six to 12 hours of BIO 700, for a minimum total of 30 semester hours of graduate credit.
[Note, M.S. students should register for BIO677 Independent study instead of BIO700 for their first two semesters in the program, and BIO700 for the remainder of the M.S.]

Diagnostic Examinations

M.S. students must present and defend a thesis proposal. All students must present and defend their thesis.

Ph.D. in Biology (60 credit hours with MS, 90 credit hours without)

Course Requirements

Complete pedagogy training during the week preceding your first fall semester in residence, and complete BIO 601 during your first fall semester in residence (incoming students only).

At least seven (7) graduate seminars (BIO 601, 650, 710, or equivalent) are required if all graduate work is completed at Miami University. A minimum of four (4) graduate seminars (BIO 601, 650, 710, or equivalent) are required if the M.S. degree is obtained at another institution.

A minimum of three (3) graduate level (e.g., 500 or above) courses, of 3 credits or more, with a 'B' or higher with at least one course in the Department of Biology. Graduate level courses taken prior to entering the Ph.D. program may be used to satisfy this requirement at the discretion of the student's Doctoral Advisory Committee.

A minimum of 30 semester hours of BIO 850.
[Note, Ph.D. students register BIO720 Graduate Research instead of BIO850 prior to passing their comprehensive exams]

Diagnostic Examinations

Ph.D. students must pass an oral and written comprehensive exam. All students must present and defend their dissertation.

MASTER OF SCIENCE (M.S.) IN BOTANY (30 credit hours)

Course Requirements

Complete pedagogy training during the week preceding your first fall semester in residence, and complete BIO 601 during your first fall semester in residence.

At least one (1) graduate seminar (BIO 650, 710, or equivalent) is required

A minimum of four (4) graduate level (e.g., 500 or above) courses, of 3 credits or more. Three of these courses are chosen from 3 of the 4 core areas in Botany:

- Ecology, taxonomy, or systematics
  - 522 (Population Genetics), 567 (Conservation Biology), 671 (Population and Community Ecology), 672 (Ecosystems and Global Ecology)
  - Other advanced courses in evolution, ecology, or taxonomy as approved by your committee
- Structure and development
  - BIO 502 (Plant Anatomy), 503 (Plant Development)
  - Other advanced courses in plant structure or development
- Cell biology, molecular biology, genetics, or physiology
  - BIO 525 (Plant Physiology), 605 (Adv. Molecular Biology), 606 (Adv. Cell Biology
  - Other advanced courses in molecular biology and genetics,
- Applied Skills
  - 566 (Bioinformatics), 581/582 (EM Theory+SEM Lab), 581/583 (EM Theory + TEM Lab)
  - Other courses in statistics methods, GIS, computer science & informatics as approved by your committee

Up to one (1) course may be substituted by an advanced undergraduate course with a grade of B or higher taken at Miami University or another institution.

Six to 12 hours of BIO 700, for a minimum total of 30 semester hours of graduate credit
[Note, M.S. students should register for BIO677 Independent study instead of BIO700 for their first two semesters in the program, and BIO700 for the remainder of the M.S.]

Diagnostic Examinations

M.S. students must present and defend a thesis proposal. All students must present and defend their thesis.

Note, there is no Ph.D program in Botany; however, students interested in pursuing a Ph.D. in the field of Botany or Plant biology should enroll in the Ph.D. program in Biology and pursue research with an appropriate advisor.

MASTER OF SCIENCE (M.S.) IN CELL, MOLECULAR, AND STRUCTURAL BIOLOGY (30 credit hours)

Course Requirements

Complete pedagogy training during the week preceding your first fall semester in residence, and complete BIO 601 during your first fall semester in residence.

At least one (1) graduate seminar in Molecular Biology (BIO 650) is required; students are encouraged to register for additional seminars related to their research interests (BIO 710, CPB 600, and MBI 690).

Select a minimum of three courses (one course must be at the 600 or 700 level):

- Biochemistry
  - CHM 532 (Fundamentals of Biochemistry)

- Cell and Molecular Biology
  - BIO 544 (Molecular Biology), BIO 549 (Biology of Cancer)
  - BIO 552 (Neuromodulation), BIO 554 (Endocrinology), BIO 557 (Neuroanatomy), BIO 569 (Neurophysiology)
  - BIO 564 (Lab in Molecular & Cell Biology), BIO 571 (Molecular Physiology)
  - MBI 514 (Immunology), MBI 545 (Microbial Genetics), MBI 564 (Human Viruses), MBI 595 (Bacterial Cellular and Developmental Biology)
  - BIO/MBI 605 (Advanced Molecular Biology), BIO/MBI 606 (Advanced. Cell Biology)

- Structural Biology
  - BCM 524 (Advanced Experimental Techniques in Structural and Functional Genomics)
  - BIO/MBI 581 (Theory of Electron Microscopy) with either BIO/MBI 582 (SEM Lab) or BIO/MBI 583 (TEM Lab)
  - CHM 740 (Special Topics in Biochemistry, topics vary), CHM 760 (Protein X-Ray Crystallography), CHM 770 (Biological Magnetic Resonance)

- Bioinformatics and Statistics
  - BIO/MBI 566 (Bioinformatics Computing Skills), BIO/MBI 585 (Bioinformatics Principles)
  - BIO 750A (Biostatistics), STA 567 (Statistical Learning)
  - CSE 532 (Machine Learning), CSE 586 (Introduction to Artificial Intelligence), CSE 627 (Advanced Machine Learning)

- Bioengineering and Biophysics
  - CPB 516 (Biochemical Engineering), CPB 517 (Quantitative Physiology), CPB 519 (Biomaterials), CPB 526 (Principles of Tissue Engineering), CPB 611 (Transport Phenomena in Engineering), CPB 612 (Engineering Analysis)
  - PHY 521 (Molecular and Cellular Biophysics), PHY 537 (Intermediate Thermodynamics and Introduction to Statistical Physics), PHY 642 (Advanced Kinetic Theory and Statistical Mechanics)

Additional graduate courses tailored to the particular research interest of the student that are approved by the student's graduate committee and the CMSB Director may be taken.

Diagnostic Examinations

M.S. students must present and defend a thesis proposal. All students must present and defend their thesis.

PH.D. IN CELL, MOLECULAR, AND STRUCTURAL BIOLOGY (60 credit hours with MS, 90 credit hours without)

Course Requirements
Complete pedagogy training during the week preceding your first fall semester in residence, and complete BIO 601 during your first fall semester in residence.

Course requirements are the same as for the M.S. (above), with the exception that at least three (3) graduate seminars, with at least one (1) graduate seminar in Molecular Biology (BIO/CHM/MBI 650), and two (2) seminars related to their research interests (BIO 710, CPB 600, MBI 690) are required. Students are encouraged to register for additional seminars (BIO/CHM/MBI 650, BIO 710, CPB 600, and MBI 690).

Additional graduate courses tailored to the particular research interest of the student and approved by the student's graduate committee and the CMSB Director may be taken.

Diagnostic Examinations
Ph.D. students must pass both oral and written components of comprehensive exam and dissertation proposal defense (Currently under review-Sept 2025). All students must present and defend their dissertation.

NOTE: CMSB students should refer to the CMSB Program Guidelines for program-specific requirements and required forms. Some requirements, such as rotation timelines, advisor selection, committee formation, and comprehensive exams, may vary relative to those listed in the Biology Department Guide to Graduate Programs.

PH.D. IN ECOLOGY, EVOLUTION, AND ENVIRONMENTAL BIOLOGY (60 credit hours with MS, 90 credit hours without)

Course Requirements

At least five (5) graduate seminars of topical relevance to EEEB. Two of these seminar credits will be taken in year 1 of the program: BIO 601, and BIO 710C (Emerging Trends in Ecology, Evolution, and Environmental Biology). The other three (3) seminars may be taken from those offered by EEEB participating departments after being approved as EEEB-related seminars.

A minimum of twelve (12) credits of graduate level courses (e.g., 500 or above). At least two (2) of these courses must be officially designated EEEB courses, and at least one (1) additional course must be from the student's home department.

A minimum of 30 semester hours of graduate research (850 Research for Doctoral Dissertation; course designation is home department, e.g. BIO850).
[Note, Ph.D. students register for 720 Graduate Research instead of 850 prior to passing their comprehensive exams]

Diagnostic Examinations

Ph.D. students must pass an oral and written comprehensive exam (Currently under review-Sept 2025). All students must present and defend their dissertation.

Appendix A. Graduate Student Funding Opportunities at Miami U

Summary of Awards and dates due:

Awards:	Due date:
1) Graduate Achievement Fund	Nov 1; Apr 1
2) Thesis/Dissertation Support	Nov 1; Mar 1
3) Marjorie Post Farrington Scholarship	Apr 1
4) Graduate Travel Fund	Oct 1; Mar 1; June 1
5) DUOS	Oct 14 (Mid-October)
6) Grad Student Publication Awards	Open Submission

Description of Awards:

Applications for some of the awards below can be found at:
https://miamioh.edu/graduate-school/awards-recognition/index.html

1) Graduate Achievement Award: The Graduate Achievement Award (awarded in Fall and Spring) is designed to recognize significant completed achievement in any external research or creative activity by full and part-time graduate students. Achievement is defined as a completed piece of research or other creative activity that has been recognized by some external (to the home department) organization or selected by the academic department for regional or national presentation (in fields where the accepted standard is departmental selection). A completed piece of research means that the presentation has already occurred or is in the process of being published. The Graduate Achievement Award fund is supported by gifts from Alumni and Friends of Miami University. More information at: https://miamioh.edu/graduate-school/awards-recognition/graduate-achievement-award/index.html

2) Master's Thesis or Dissertation Research Support: The Associate Provost for Research and the Dean of the Graduate School will entertain requests for unusual expenses associated with a student's research for the doctoral dissertation. There is no application form, but you must briefly describe your dissertation or thesis project and explain why these expenses are necessary and offer a tentative budget. Students must also submit a letter of support from the advisor. Awards will not exceed $600 for doctoral students and $300 for Master's students, and will often be less, depending on the demand. To be eligible a doctoral student must have passed the comprehensive exams. Decisions on this special funding will be made after **November 1**and **March 1**. Requests submitted by form:
https://miamioh.qualtrics.com/jfe/form/SV_6XWODX6c4aomp0y

3) Marjorie Post Farrington Scholarship: This $1,000 scholarship (Due April 1)is for full-time graduate students in any area of study. The award is made primarily on merit and secondarily on financial need. Financial need must be established and the student must be eligible to file the FAFSA. The student who is selected may also be appointed to a graduate assistantship or teaching assistantship. Selection of the recipients is made by the Graduate Council, Student Financial Aid Committee. Further information may be obtained by contacting the Graduate School, 102 Roudebush Hall, (513) 529-3734, or at https://miamioh.edu/graduate-school/awards-recognition/marjorie-post-farrington-scholarship/index.html

4) Graduate Travel: Graduate Student Association (G.S.A.) Travel Assistance Fund: The G.S.A. Travel Assistance Fund is designed to reimburse graduate students for travel to meetings, conventions, conferences, and workshops sponsored by professional organizations. The fund is administered by G.S.A.

More information can be found at:
https://student.miamioh.edu/portal/forms?form=716016ec-5ac5-4fe3-9a89-62d15be19b35&_ga=2.216451408.714677996.1724074647-1717784833.1723650992

5) DUOS The Doctoral-Undergraduate Opportunities for Scholarship: DUOS is an initiative aimed at heightening the synergy between graduate and undergraduate programs at Miami University, sponsored by the Graduate School, the Office of Advancement of Research and Scholarship, and Miami's Preparing Future Faculty initiative. The deadline is **October 14** (mid-October). This program enables Miami undergraduates to do research or other creative activities with the guidance of a graduate student mentor. Students may request up to $1,000 per project. Applications may be initiated by either graduates or undergraduates, but the undergraduate student is to have intellectual ownership of the project and the submitted application must be agreed to and signed by both students. Application to the program is open to any Miami University undergraduate student and any post-master's doctoral student in good standing who agree to abide by program requirements:
https://miamioh.edu/undergraduate-research/research-opportunities/doctoral-undergraduate-opportunity-scholarships.html

7) Biology Graduate Student Publication Awards: To reward publication efforts of our graduate students, the Biology Department will offer an additional $300 for travel to meetings for each manuscript where the graduate student is a) the first-author or b) a co-author on a manuscript with an undergraduate first-author, resulting from mentorship from the graduate student. Manuscripts should be “in press” or published. Students may apply for a travel award for each paper once. To apply, please fill out Form PA and submit it to the purchasing department and the chair of the department.

Appendix B. Forms to be submitted & maintained for M.S. & Ph.D. programs

M.S. Program Forms

- ☐ 1. Report of Advisory Committee Meetings (Departmental G-1). Update once per year.
- ☐ 2. Plan of Study Form (Departmental G-2). Due no later than end of 2nd semester in residence.
- ☐ 3. Defense of Research Proposal Approval Form (Departmental G-3). Due no later than 1 semester prior to final defense of thesis.
- ☐ 4. Form M-1. Certificate for Awarding the Master's Degree (Grad School). Submitted after passing the final defense and at least 10 business days prior to applicable commencement date.
- ☐ 5. Form M-2. Certificate to Award the Master's Degree. Completed by Graduate Director, Department Chair, or their Designee Initiated
- ☐ 6. Form CMSB-M. CMSB Master's Degree Program and Certification Form (end of document)

Ph.D. Program Forms

- ☐ 1. Report of Doctoral Advisory Committee Meetings (Departmental). Meet at least once per year.
- ☐ 2. Plan of Study Form (Departmental). Due no later than end of 2nd semester in residence.
- ☐ 3. Form D-1. Request for Appointment of Doctoral Comprehensive Examination Committee (Grad School). Due 10 business days prior to beginning of exam.
- ☐ 4. Form D-2. Results of Comprehensive Exam for the Doctoral Degree and Application for Candidacy (Grad School). Submitted after completion of written and oral exams.
- ☐ 6. Form D-3. Request for Appointment of Doctoral Final Examination Committee (Grad School). Due 10 business days prior to final defense of dissertation.
- ☐ 7. Form D-4. Results of Final Examination and Certificate for Awarding the Doctoral Degree (Grad School). Submitted after passing the final defense and at least 10 business days prior to applicable commencement date.
- ☐ 8. Form D-5: Certificate to Award the Doctoral Degree. Completed by Graduate Director, Department Chair, or their Designee Initiated
- ☐ 9. Form CMSB-D. CMSB PhD Degree Program and Certification Form (end of document)

Student Progress Forms

- ☐ All graduate students are required to submit updated Annual Progress Reports (Departmental AP) at the beginning of each year (Google Form Link will be sent to all graduate students; as an example, see 2024 form).

Student Performance Rubrics for Program Assessment

☐ Committee members will fill out student performance rubrics for the comprehensive exam (Ph.D. and Botany M.S.) and Thesis/Dissertation defense; available here.

Appendix C. Graduate School and Departmental Forms

Graduate School forms (all forms available online through the graduate school website: https://miamioh.edu/graduate-school/faculty-staff-resources/forms-and-publications.html)

Form ID	Required for:	Form title
M-1	M.S.	Results of the Final Examination for the Master's Degree (Docusign, send committee names/emails to Dept. to initiate)
M-2	M.S.	Certificate to Award the Master's Degree. Completed by Graduate Director, Department Chair, or their Designee Initiated (Qualtrics form)
D-1	Ph.D.	Request for Appointment of Doctoral Comprehensive Examination Committee (Qualtrics form; student initiated)
D-2	Ph.D.	Results of Comprehensive Exam for the Doctoral Degree and Application for Candidacy (Docusign, send committee names/emails to Dept. to initiate)
D-3	Ph.D.	Request for Appointment of Doctoral Final Examination Committee (Qualtrics form; student initiated)
D-4	Ph.D.	Results of Final Examination and Certificate for Awarding the Doctoral Degree (Docusign, send committee names/emails to Dept. to initiate))
D-5	Ph.D.	Certificate to Award the Doctoral Degree. Completed by Graduate Director, Department Chair, or their Designee Initiated (Qualtrics form)

Biology Department forms included in Appendix C (in order of appearance):

Form ID	Required for:	Form title
Biology Department Committee Forms		
G-1	M.S./Ph.D.	Department of Biology Record of Graduate Committee Meetings
G-2	M.S./Ph.D.	Plan of Study for Biology Department Graduate Programs
G-3	M.S./Ph.D.	Defense of Research Proposal Approval Form
Biology Department Application Forms		
BP	M.S.	Biology Department Master's Bypass Approval Form
TA	M.S./Ph.D.	Requests for Financial Support to Present Paper or Poster (Travel Award)
PA	M.S./Ph.D.	Biology Graduate Student Publication Awards
Student Progress Forms		
AP	M.S./Ph.D.	Annual Progress Form (Google Form Link will be sent to graduate students; due at the start of calendar year; as an example, see 2024 form

Student Performance Rubric for Program Assessment

M.S./Ph.D.	Assessment rubric for Comprehensive Exam (Ph.D. and Botany M.S.) and Thesis/Dissertation Written and Oral Defense (Ph.D. and M.S.) (Google Form sent to Committee members)

Department of Biology Record of Graduate Committee Meetings

Student: _____ Degree Program:_____ Admitted (mo/yr):_____

Committee Members:

(minimum 3 for M.S., 4 plus 1 grad school rep for Ph.D)

Name (Print)	**Initials** (for ID below)	**Dates served (mo/yr):**
_____ (Advisor)	_____	_____
_____ (Co-Advisor if applicable)	_____	_____
_____ (Committee member)	_____	_____
_____ (Committee member)	_____	_____
_____ (Committee member)	_____	_____
_____ (Grad School Representative[2])	_____	_____

Record of Graduate Committee Meetings

(Graduate student advisory committees should meet at least once a year.)

Meeting Date (dd/mo/yr)	**Topic**	**Members present (initials)**
1) _____	_____	_____
2) _____	_____	_____
3) _____	_____	_____
4) _____	_____	_____
5) _____	_____	_____
6) _____	_____	_____
7) _____	_____	_____
8) _____	_____	_____
9) _____	_____	_____
10) _____	_____	_____

Plan of Study for Biology Department Affiliated Graduate Programs*

*Note, CMSB has its own program-specific form (see below)

Name of Student:_____ Admitted (mo/yr): _____

Degree Program: **M.S.** **Ph.D.** Graduate Program: **Biology** **Botany** **EEEB**

A. Undergraduate Courses (Courses to be taken to address deficiencies in undergraduate course work)

Course Title (Dept/No./credits)	Semester	Year
1) _____	_____	_____
2) _____	_____	_____

B. Graduate Courses (see Biology and Botany Program descriptions for specific program requirements; Botany students list approved substitutes for Area requirements and indicate institution).

Course Title (Dept/No./credits)	Semester	Year	Area (Bot only)	EEEB course (EEEB only)
1) _____	_____	_____	_____	_____
2) _____	_____	_____	_____	_____
3) _____	_____	_____	_____	
4) _____	_____	_____	_____	
5) _____	_____	_____		
6) _____	_____	_____		

C. Seminars (see Biology, Botany, and EEEB Program descriptions for specific program requirements)

	Semester	Year
1) Pedagogy Workshop, pre-Fall semester	Fall	_____
2) BIO 601: Graduate Colloquium	Fall	_____
3) BIO 650 or BIO 710 (for EEEB also GLG, MBI, GEO 710)	All listed in DARS	
4) Seminar equivalents (if applicable, list below)		
_____	_____	_____
_____	_____	_____

D. Research

For M.S: all BIO 677 (semesters 1 & 2) and BIO 700 (subsequent semesters) listed in DARS.
For Ph.D: all BIO 720 (pre-comps) and BIO 850 (post-comps) listed in DARS.

E. Graduate Committee

Major Professor: _____ Date Selected: _____
Graduate Committee Members: Date Selected: _____

_____ _____

_____ _____

Graduate School Representative (Ph.D. only):_____
Department Chair Approval**: _____ Date: _____
**Approval must be obtained before first committee meeting.

F. Plan of Study Approval (Committee members' initials required):

Original Plan of Study: _____ Date: _____

Revisions to Plan of Study: _____ Date: _____
_____ Date: _____

Masters Oral Comprehensive (Botany M.S. only): _____ Date: _____

Defense of Research Proposal Approval Form

Student's name: _____ Degree Program: _____

Title of Thesis Proposal: _____

_____

The above named student has presented and defended a written proposal for research to be conducted in partial fulfillment of the requirements for a graduate degree in Biology/Botany.

Signatures (with dates) of the Thesis/Dissertation Committee members[1] approving this Proposal:

Name (Print)	**Signature**	**Date**
_____ (Advisor)	_____	_____
_____ (Co-Advisor if applicable)	_____	_____
_____ (Committee member)	_____	_____
_____ (Committee member)	_____	_____
_____ (Committee member)	_____	_____
_____ (Grad School Representative[2])	_____	_____

[1]at least two other committee members for M.S. Thesis and three for Ph.D. Dissertation Committees.

[2]Ph.D. Committee only

Biology Department Master's Bypass Approval Form

Applications to bypass the Master's degree and to be admitted to the Ph.D. program should be approved by the student's Graduate committee and forwarded to the GAC chair no later than the end of the third semester of residence to the GAC chair in order to be admitted to the Ph.D. program in the 4th semester. The student may then submit a formal request to change their major online (https://miamioh.edu/graduate-school/student-resources/index.html, scroll to Change of Major/Degree Request Form under "Forms").

A. Student Information

Name of Student:_____ Admitted (mo/yr): _____

Name of Advisor: _____ Graduate Program: **Biology** **Botany**

Current GPA: _____ Semester application submitted: _____

B. Graduate Courses Taken

	Course No.	Course Title	Semester	Year	Grade
1)	_____	_____	_____	_____	____
2)	_____	_____	_____	_____	____
3)	_____	_____	_____	_____	____
4)	_____	_____	_____	_____	____
5)	_____	_____	_____	_____	____

C. Justification for bypassing the Master's degree (Limit: 2 pages, double spaced)

Please attach your justification for converting to the Ph.D. program. Evidence that you are prepared to enter the Ph.D. program could include a summary of the data you have already collected and analyzed, how your current research has positioned you for future investigations (i.e., doctoral research), a brief description of any manuscripts on which you are author or co-author (and when they might be submitted), as well as any presentation(s) you have made at professional meetings.

D. Signatures of approval

	Date
_____ Student	_____
_____ Major Advisor	_____
_____ Committee Member	_____
_____ Committee Member	_____
_____ Chair of the GAC	_____

DEPARTMENT OF BIOLOGY
GRADUATE STUDENT ENRICHMENT FUNDS

REQUEST FOR FINANCIAL SUPPORT TO PRESENT PAPER OR POSTER

Student's Name_____ **Date**_____

Name of Society or Organization_____

Location of meeting_____

Dates:_____

Title of Paper or Poster (circle one)_____

_____

_____

Co-authors(s):_____

Estimated expenses**:**

Travel_____

Registration_____

Housing_____

Meals_____

TOTAL_____

Advisor's Signature_____

This form must be submitted at least **one month** prior to the meeting**. You must be the presenting author in order to receive financial support.**

Attach a copy of the abstract for the paper or poster.

BIOLOGY GRADUATE STUDENT PUBLICATION AWARDS

To reward publication efforts of our graduate students, the Biology Department will offer an additional $300 for travel to meetings for each manuscript where the graduate student is a) the first-author or b) a co-author on a manuscript with an undergraduate first-author, resulting from mentorship from the graduate student. Manuscripts should be "in press" or published beginning 1 January of the same year as the meeting. Students may apply for a travel award for each paper once. To apply, please fill out this form and submit it to Tammy Lewis, lewistg@miamioh.edu

_____

LAST NAME FIRST NAME

Degree currently being sought: ☐ Ph.D. ☐ MS ☐ MA ☐ MAT

Graduate Degree Program: ☐ Biology ☐ Botany ☐ EEEB ☐ CMSB

Students may apply for a travel award for each paper once.

Manuscript Title: _____

Author(s): _____

Journal: _____

Issue & Page Numbers (if available): _____

Publication Date or Expected Publication (for *in press* publications): _____

Meeting to attend and date: _____

Please describe your contributed effort to the paper:

Graduate Student Signature _____ Date _____

Advisor's Signature _____ Date _____

Master's Degree Program and Certification Form

Name of Student: _____

BS/BA from: _____ Major: _____

Date Entered CMSB Program: _____ Conditions: _____

Rotation lab(s): _____

These Committee (must be approved before first committee meeting)

Major Advisor:_____ Date Selected: _____

Committee Chair: _____

Additional Member(s): _____

CMSB Director Approval: _____ Date: _____

Background courses (undergraduate level courses; indicate when and where courses were taken or how to make up if deficient)

General/Organic Chemistry: _____

Physics/Engineering: _____

Statistics/Computer Science: _____

Biology courses appropriate to student's research interest: _____

Course requirements (indicate course, MU or otherwise, date taken or to be taken)

Pedagogy for Grad Students (BIO or CHM)			MU	Summer	Year
	BIO 601	First semester seminar	MU	Fall	_____
	BCM 650	Seminar in Molecular Biology	MU	_____	_____

I. Additional seminars

Example	BIO 710	Advanced Seminar in Biology	MU	Fall	2025
	_____	_____	___	_____	_____
	_____	_____	___	_____	_____
	_____	_____	___	_____	_____

II. At least three (3) formal courses. (One course must be at the 600 level.)

Example	BIO 605	Advanced Molecular Biology	MU	Spring	2026
	_____	_____	___	_____	_____
	_____	_____	___	_____	_____
	_____	_____	___	_____	_____

Additional Courses (approved by the student's committee)

Approval of Plan of Study: Name and signature of thesis committee members, and date.

Name (Print and Signature)	Date (month/day/year)
Committee Chair	
Advisor	
Additional Member	
Additional Member	

Checklist of Progress and Requirements

- ☐ Committee meetings conducted (at least once in 12 months) Date: _____
  Date: _____ Date: _____ Date: _____ Date: _____
- ☐ Thesis Prospectus Approved (submit this hard copy to Admin.) Date: _____
- ☐ Thesis Defense (**GS Form M-1**submitted) Date: _____
- ☐ Thesis Approved and Submitted to OhioLink Date: _____
- ☐ Certificate to Award the Master's Degree (**GS Form M-2** submitted) Date: _____
- ☐ Title of Thesis: _____

_____

- ☐ Exit Interview with CMSB Director: Date: _____

  Permanent contact address: _____

  Permanent contact email: _____

Ph.D. Degree Program and Certification Form

Name of Student: _____

BS/BA from: _____ Major: _____

MS/MA from: _____ Major: _____

Date Entered CMSB Program: _____ Conditions: _____

Rotation lab(s): _____

Dissertation Committee (must be approved before first committee meeting)

Major Advisor: _____ Date Selected: _____

Committee Chair: _____

Grad School Representative: _____

Two or More Additional Member(s): _____

CMSB Director Approval: _____ Date: _____

Background courses (undergraduate level courses; indicate when and where courses were taken or how to make up if deficient)

General/Organic Chemistry: _____

Physics/Engineering: _____

Statistics/Computer Science: _____

Biology courses appropriate to student's research interest: _____

Course requirements (indicate course, MU or otherwise, date taken or to be taken)

Pedagogy for Grad Students (BIO or CHM)			MU	Summer	Year
	BIO 601	First semester seminar	MU	Fall	_____
	BCM 650	Seminar in Molecular Biology	MU	_____	_____

I. Additional seminars

Example	BIO 710	Advanced Seminar in Biology	MU	Fall	2025
	_____	_____	___	_____	_____
	_____	_____	___	_____	_____
	_____	_____	___	_____	_____
	_____	_____	___	_____	_____
	_____	_____	___	_____	_____

II. At least three (3) formal courses. (One course must be at the 600 level.)

Example	BIO 605	Advanced Molecular Biology	MU	Spring	2026
	_____	_____	___	_____	_____
	_____	_____	___	_____	_____
	_____	_____	___	_____	_____

Additional Courses (approved by the student's committee)

_____	_____	___	_____	____
_____	_____	___	_____	____
_____	_____	___	_____	____

Approval of Plan of Study: Name and signature of thesis committee members, and date.

Name (Print and Signature)	Date (month/day/year)
Committee Chair _____	_____
Advisor _____	_____
Grad School Representative _____	_____
Additional Member _____	_____
Additional Member _____	_____
Additional Member _____	_____

Checklist of Progress and Requirements

☐ Committee meetings conducted (at least once in 12 months) Date: _____

Date: _____ Date: _____ Date: _____ Date: _____ Date: _____

☐ Comprehensive exam request (**GS Form D-1** submitted) Date: _____

☐ Comprehensive exam passed (**GS Form D-2** submitted) Date: _____

☐ Dissertation proposal approved (submit this hard copy to Admin.) Date: _____

☐ Final examination committee appointed (**GS Form D-3** submitted) Date: _____

☐ Dissertation defense (**GS Form D-4** submitted) Date: _____

☐ Dissertation approved and submitted to OhioLink Date: _____

☐ Certificate to Award the Doctoral Degree (**GS Form D-5** submitted) Date: _____

☐ Title of Dissertation: _____

_____

☐ Exit Interview with CMSB Director: Date: _____

Permanent contact address: _____

Permanent contact email: _____