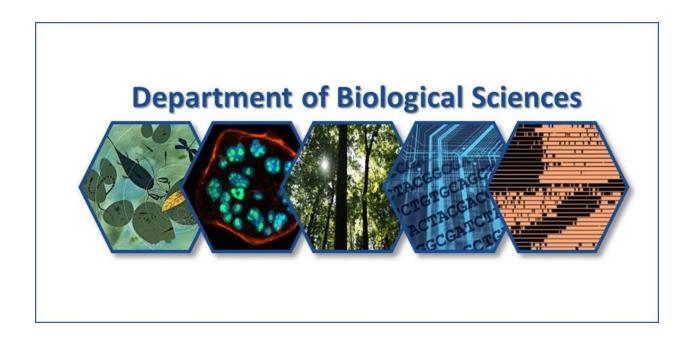
# The Department of Biological Sciences Graduate Student Handbook



# **College of Arts and Sciences The University of Memphis**

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This handbook is available online at: https://www.memphis.edu/biology/graduate/handbook.php

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# PART I. INTRODUCTION, APPLICATION AND ADMISSION

#### IA. INTRODUCTION

Welcome to the Department of Biological Sciences at The University of Memphis.

Graduate faculty members in the Department of Biological Sciences have diverse research interests covering most of the major fields of biology and taxa of organisms as well as biology education (for a detailed description see:

https://www.memphis.edu/biology/researchareas/index.php). Our department offers graduate programs leading to Master (MS) and Doctorate (PhD) degrees. There are two options for the Master's degree in the Department of Biological Sciences: (1) The Master's degree requiring a thesis is designed for students who plan to continue work toward a doctorate and/or have an interest in research and teaching, or for students who wish to seek upper-level or advanced positions in the workplace; (2) the non-Thesis Master's degree for students seeking to increase their potential to be accepted in professional school by taking biology courses at a graduate level.

The mission of the Department of Biological Sciences graduate program is to train students to conduct cutting-edge and productive research in biological sciences by: (1) providing them with a comprehensive and up-to-date knowledge of their field of research, (2) mentoring them to design and conduct experiments and/or field observations as well as to rigorously analyze and interpret data based on a thorough knowledge of the existing literature, (3) guiding them through the process of publishing results in peer-reviewed journals and presentations at scientific meetings. Our program is committed to attracting the most talented individuals regardless of their gender, race, sexual orientation, or any other dimension of diversity.

This handbook contains four parts describing: (1) the application and admission process to our graduate programs (a wealth of information about the application and graduation process is also available on the Graduate School's website

(<u>https://www.memphis.edu/gradschool/</u>)), (2) The graduate curriculum for the MS and PhD programs and timetables of the steps needed to graduate, (3) the policies of our graduate program and (4) an annex with various internet links.

Versions of the graduate handbook dated from different years may be present on the Department of Biological Sciences website

https://www.memphis.edu/biology/graduate/handbook.php . The graduate curriculum applying to students throughout their tenure in the program is the one described in the version of the graduate handbook dated from the semester students enter the program. If there is no version dated from that semester, the graduate curriculum applying to students throughout their tenure in the program is the one described in the version of the handbook dated from the closest semester preceding that at which students enter

the program.

The <u>policies</u> applying to graduate students, <u>irrespective of their time of entry in the program</u>, are those outlined in the most current version of the graduate handbook.

Various Graduate School forms must be completed during your graduate studies. This handbook instructs you on where to find these forms and how to process them. Finally, this handbook includes departmental policies related to the graduate program and outlines of the roles of the different graduate faculty constituent in helping you to progress toward graduation. Each student is responsible for reading and following the requirements set forth herein and by the Graduate School.

Graduate students are automatically members of the Graduate Student Association (<a href="https://www.memphis.edu/gsa/index.php">https://www.memphis.edu/gsa/index.php</a>). They are also strongly encouraged to enroll in the University of Memphis Biological Sciences Graduate Students Association (UofM bioGSA).

#### **IB. APPLICATION AND ADMISSION**

#### **IB1. APPLICATION PROCESS**

- To be competitive, applicants should have majored in a STEM or STEM education discipline or have completed upper division coursework in one of these disciplines.
- The Graduate Record Exam (GRE) is <u>not</u> required for admission into our graduate program.
- 3. **Prospective MS students** must hold a Baccalaureate degree from an accredited institution. For these applicants, an overall minimum grade point average of 2.75 (on a 4.0 scale) at the undergraduate level is usually competitive.
- 4. <u>Prospective PhD students</u> must hold either a Master or a Baccalaureate degree from an accredited institution. To be competitive, applicants should have an overall minimum grade point average of 2.75 (on a 4.0 scale) at the undergraduate level and 3.0 (on a 4.0 scale) at the graduate level to be competitive.
- 5. Applications will be submitted online through The University of Memphis Graduate School portal (https://memphis.liaisoncas.com/applicant-ux/#/login). Information on the application process can be obtained by emailing the department of Biological Sciences Graduate Studies Coordinator (grad studies coordinator@memphis.edu).
- 6. To be considered for admission into the Biological Sciences graduate program, applicants must have identified a faculty advisor. Faculty research interests are listed on the department website (https://www.memphis.edu/biology/researchareas/index.php). After reviewing the information on this website, applicants should interact directly with faculty whose research interests match their own. The faculty who agrees to sponsor an applicant will send to the applicant and to the Graduate Studies Coordinator

(grad\_studies\_coordinator@memphis.edu) a letter or email stating that (1) he/she is willing to mentor the applicant if accepted into the program during his/her graduate studies and (2) how the applicant will be funded if accepted into the program. This letter is critical since no applicants will be accepted into the Department of Biological Sciences graduate program without an advisor.

- 7. The applicant must have the following document uploaded or sent to the Graduate School by following the instruction on the Graduate School portal (https://memphis.liaisoncas.com/applicant-ux/#/login):
  - Official transcripts of all previous academic coursework must be sent directly from the issuing institution to The University of Memphis Graduate Admissions.
  - b. Applicants whose highest degree is from a foreign institution must have their credentials evaluated by any credentialing agency listed on the National Association of Credential Evaluation Services' website. The course-by-course report is required.
  - c. Two letters of recommendation from persons capable of assessing the applicant's suitability for graduate work in biology must be submitted to the Graduate School application site (https://memphis.liaisoncas.com/applicant-ux/#/login) or to the Department of Biological Sciences Graduate Studies Coordinator (grad studies coordinator@memphis.edu).
  - d. A statement of interest describing in about 500 words the applicant's research interests, previous research experience (if applicable), as well as academic and career objectives.
- 8. International Applicants (F1 visa)

Requirements specific for international applicants and information on steps to obtain the I-20 can be found on this website:

https://www.memphis.edu/graduateadmissions/international/index.php.

Applicants accepted in the program should initiate the request for I20 as soon as possible after learning about their acceptance.

Applicants for whom English is not their native language must submit proof that they have taken an English Language Proficiency test. The different tests accepted and the minimal scores for acceptance in the program and for GTA consideration can be found on:

https://www.memphis.edu/iei/speaktest/index.php. This website also has information on the SPEAK test. This test can be taken on-campus by international students who have been accepted into the program but whose English Proficiency test does not qualify them for a GTA. Finally, for those who are interested, please note that the University offers on campus an Accent Modification course: <a href="https://www.memphis.edu/iei/speaktest/index.php">https://www.memphis.edu/iei/speaktest/index.php</a> (scroll down to the bottom of the page).

During the application process applicants are encouraged to be in communication with their potential advisor and/or with the Graduate Studies coordinator (grad studies coordinator@memphis.edu).

#### **IB2. GRADUATE TEACHING ASSISTANTSHIPS AND FELLOWSHIPS**

Some students who are accepted to the department of Biological Sciences graduate program may be eligible for a graduate teaching assistantship (GTA). The applicant's prospective faculty advisor should mention in the support letter if he/she wishes the applicant to be considered for a GTA.

The GTA stipends are:

PhD before passing all the candidacy requirements: \$15,750 (11-month support).

PhD after passing all the candidacy requirements: \$17,750 (11-month support).

MS before passing all the candidacy requirements: \$11,750 (10-month support).

MS after passing all the candidacy requirements: \$13,750 (10-month support).

Students seeking income during the summer semester should discuss available opportunities with their primary advisor and/or inquire the graduate coordinator about GTA opportunities during the summer semester.

Typically, GTAs are also awarded a tuition waiver by the department.

The duties of GTA recipients are outlined in **Section IIIE** of this Handbook.

The University offers three fellowships for graduate students, including: First Generation STEM doctoral Fellowship

(<u>https://www.memphis.edu/research/researchers/studentresearch/firstgenerationstemfellowship.php</u>), First Generation PhD/MFA Fellowship

(https://www.memphis.edu/gradschool/current\_students/fellowships/first\_generation.php), Van Vleet Memorial Doctoral Award

(<u>https://www.memphis.edu/gradschool/current\_students/fellowships/vanvleet.php</u>). The first two of these fellowships are for first generation minority PhD students.

#### **IB3. APPLICATION DEADLINES**

It is preferable for graduate students to begin in the fall semester. However, graduate students may be accepted for the spring or summer terms.

The deadline for applications for the <u>Fall term</u> is February 1 for applicants seeking a Graduate Teaching Assistantships (GTA) and June 1 for other applicants. Applications received by <u>February 1</u> will be reviewed as a pool by the Graduate Studies Committee who will award the Graduate Teaching Assistantships (GTAs) available at this time to the most competitive applications. Applications received between February 1 and June 1 will be reviewed by the Graduate Studies Committee after June 1. These applications may be considered for GTA **only if** GTA positions are available at this time.

The deadline for applications for the **Spring term** is September 15 for applicants seeking a Graduate Teaching Assistantships (GTA) and November 1 for other

applicants. Applications received by <u>September 15</u> will be reviewed as a pool by the Graduate Studies Committee who will award the Graduate Teaching Assistantships (GTAs) available at this time to the most competitive applications. Applications received between September 15 and November 1 will be reviewed by the Graduate Studies Committee after November 1. These applications may be considered for GTA **only if** GTA positions have become available at this time.

During any admission cycle, students already in the program and without a GTA may apply for a GTA by providing to the Graduate Studies Coordinator (<a href="mailto:grad\_studies\_coordinator@memphis.edu">grad\_studies\_coordinator@memphis.edu</a>) a support letter from their mentor and any other supporting material. The support letter must be provided by the above deadlines. The request for GTA will be evaluated with those of the pool of applicants being reviewed during the admission cycle.

# IB4. PROCEDURE FOR ACCEPTANCE TO MS or PhD GRADUATE STUDIES IN THE DEPARTMENT OF BIOLOGICAL SCIENCES

Acceptance of applicants to the MS or PhD graduate program in Biological Sciences is decided by an anonymous vote of the Department of Biological Sciences Graduate Studies Committee. The same procedure also applies to the award of graduate teaching assistantships.

The Graduate Studies Committee meets regularly to review and evaluate applications to the departmental graduate program. Applications are evaluated based on the GPA, transcripts, letters of recommendation, mentor letter, and research experience of the applicant. The scores of an English Proficiency test (see section IB1, paragraph 8) are also taken into consideration for international (F1 visa) applicants.

Students acceptance is for the semester indicated on their application. Accepted students who want to join the program at a later semester, must contact their prospective mentor and the Graduate Studies Coordinator to determine whether their acceptance will still be valid that semester or whether they should then re-apply.

Meeting entrance requirements for admission does not guarantee acceptance into the MS or PhD program of the Department of Biological Sciences.

Undeclared majors accepted by the Graduate School are not guaranteed acceptance into the Department of Biological Sciences graduate program.

Acceptance of applicants into the Department of Biological Sciences Graduate Program is final only when approved by the Graduate School.

# PART II. GRADUATE CURRICULUM

#### IIA. INTRODUCTION

This part of the Handbook describes the classes that graduate students must take while working toward their degree as well as other requirements required to graduate.

The <u>graduate curriculum</u> applying to students <u>throughout their tenure in the program</u> is the one described in the version of the graduate handbook dated from the semester students enter the program. If there is no version dated from that semester, the <u>graduate curriculum</u> applying to students <u>throughout their tenure in the program</u> is the one described in the version of the handbook dated from the closest semester preceding that at which students enter the program.

#### IIB. MASTER (MS) OF SCIENCES DEGREE REQUIREMENTS - THESIS

See **Section IIB17** of this Handbook for a timeline checklist summarizing the information about the requirements for the MS in biological Sciences program.

#### **IIB1. TIME FOR DEGREE COMPLETION**

For full-time students, all requirements for graduating with an MS degree should generally be completed within three years of continuous enrollment. Exceptions to this requirement can be made by petitioning the Graduate Studies Committee. Grades earned in courses taken before the program time limits will be shown on the transcript and will be calculated in the cumulative GPA but will not be accepted for graduation purposes. Exceptions to this rule can be made by petitioning the Graduate Studies Committee.

#### **IIB2. FULL-TIME STATUS**

Before passing all the pre-proposal exam requirements, MS students are considered full-time when signing up for 9 credit hours per semester.

After passing all the pre-proposal exam requirements, MS students are considered full-time when signing up for 6 credit hours per semester. Exceptions may apply to students on an F1 visa and on some fellowships may still have to sign up for 9 credit hours per semester.

After having completed all the 72 credit hours program course requirements, MS students are considered full-time when signing up for 1 credit hour of BIOL 7996.

#### **IIB3. MS PROGRAM REQUIREMENTS**

- 1. A minimum of 30 credit hours is required beyond the baccalaureate degree. A minimum of 18 semester hours must be taken in residence.
- 2. Seventy percent of the 30 semester hours (i.e., a minimum of 21 hours) must be at the 7000 level or above and a minimum of 12 hours in the major is required. The student's Advisory Committee may require additional courses that will bring the number

of credit hours above 30.

- 3. Students must earn at least a "B" or "S" (Satisfactory) on all graduate course required by the Department of Biological Sciences or by the student's Advisory Committee.
- 4. Students are allowed to repeat graduate courses only one time and no more than two courses may be repeated. Approval to repeat a course must be obtained from the Graduate Studies Committee in consultation with the student's Advisory Committee.
- 5. A cumulative grade point average of 3.0 or better must be maintained. Students whose grade point average drops below 3.0 will have one semester to raise their GPA to 3.0 or higher. Continuation of students who fail to reach a 3.0 overall GPA during two consecutive semesters while in the graduate program is at the discretion of the Graduate Studies Committee in consultation with the student's advisory committee.
- 6. Mandatory courses include <u>BIOL 7000</u> (Orientation to Graduate Studies), <u>BIOL 7004</u> (College Biology Teaching), 6 credit hours of BIOL 7092 (Research), up to 3 credit hours of <u>BIOL 7200</u> (Seminar in Biology), <u>BIOL 7102</u> (Thesis Proposal), 6 credit hours of <u>BIOL 7996</u> (Thesis Research), and <u>BIOL 7600</u> (Thesis Defense Seminar). Attendance at departmental seminars is mandatory. BIOL 7000 and BIOL 7004 must be completed during the first year of residence and <u>BIOL 7600</u> in the last semester.
- 7. Full-time MS students should become candidates usually no later than the end of their fourth semester in residence. To become candidates they must have: (1) successfully passed BIOL 7000, BIOL 7004 and BIOL 7092; (2) successfully taken the written and oral Comprehensive Examination administered by the student advisory committee; the scope of this examination is broad and includes a review of general biological principles; (3) successfully taken the Research Proposal (BIOL 7102) exam that includes a written research proposal, a seminar on the research proposal and an examination of the research proposal by the student's thesis committee.
- 8. At least 6 credit hours of post-candidacy thesis research (BIOL 7996) must be completed after students become candidate. No more than 6 credit hours of BIOL 7996 will be counted toward the degree. Students cannot register for BIOL 7996 until after they have passed BIOL 7102 (Research Proposal). Once students enroll for Biology 7996, they must enroll for BIOL 7996 each academic semester until the thesis is completed, even if this brings the total number of credits hours above the 30 required.
- 9. A written thesis detailing the results of the student research. The thesis must demonstrate mastery of scientific writing and of the techniques and intellectual process of scientific research.
- 10. A Final Examination including a public thesis seminar (BIOL 7600). This usually takes place during the last semester in the program. The seminar will be announced and open to the public. The final examination is conducted after the seminar by the student Advisory Committee. The thesis committee consist, insofar as possible, of the same graduate faculties involved in the Comprehensive and Proposal Examinations.

Upon successful completion of the final examination and all degree requirements, the committee will recommend awarding the MS degree.

11. While not an MS program requirement, MS Students are strongly encouraged to present papers and posters at professional meetings and to publish papers in peer reviewed scientific journals.

#### **IIB4. TRANSFER OF UNDECLARED MAJOR CREDITS**

MS students who have successfully completed 7000 level courses while being undeclared majors at the University of Memphis Graduate School may apply up to nine credits of these course to their graduate degree, if this is approved by their Advisory Committee and the Graduate School.

To transfer undeclared major credits students must use this form: https://www.memphis.edu/gradschool/pdfs/forms/doctoral\_transfer\_credit.pdf.

#### **IIB5. SWITCHING CLASSES AND REQUESTS FOR GRADE CHANGE**

To switch out a class, students should first sign up for the new class and then sign out from the class to be replaced. Otherwise there will be a late charge associated with the switch.

Requests for grade change are carried out by filling in and following the instructions on this form: https://www.memphis.edu/registrar/pdf-docs/forms/gc\_form.pdf.

#### **IIB6. ADVISORY COMMITTEE**

During the first year in the program, MS students and their advisor (major professor) will form an Advisory Committee. The Advisory Committee will comprise three graduate faculty members who will vote Pass or Fail on the student's comprehensive exam, prospectus/proposal exam and final exam. The Advisory Committee will include the major professor and two other voting graduate faculty members. Additional, non-voting members may also be included in the Advisory Committee. At least two of the three voting Advisory Committee members must be from the Department of Biological Sciences at The University of Memphis. Only one voting committee member may be from outside the University. This member should apply to the graduate school (https://www.memphis.edu/gradschool/resources/gfs\_app\_instructions.php) for affiliate or adjunct graduate faculty member status. Only one affiliate or adjunct graduate faculty member may serve as a voting member of the Advisory Committee.

If necessary, committee members may be added, replaced or removed (see **section IIB7**).

When the committee is formed or at the first committee meeting, students must fill in the "Thesis/Dissertation Faculty Committee Appointment Form" available at: <a href="https://www.memphis.edu/eece/programs/docs/td\_committee\_form.pdf">https://www.memphis.edu/eece/programs/docs/td\_committee\_form.pdf</a>. The form must be signed by all committee members, the Department Chair and the Graduate Studies Coordinator. Students must then make three copies of the form, one for themselves, one for the major professor and one for the department. Finally, Students must promptly bring the signed form to the College of Arts and Sciences where it will be signed by the College Director of Graduate studies. The college then forwards the form to the

Graduate School for final approval and the Graduate School archives the form.

At least three voting members of the student's Committee must be physically or remotely (through skype or other similar remote communication electronic software) present during the oral component of these three exams: comprehensive, prospectus/proposal, and final.

Students should meet with their Advisory Committee at least once a year. During these meetings, the Advisory Committee will review students' progress and advise on the experimental design and technical aspects of the research project. Students may call for an Advisory Committee meeting to discuss any roadblock encountered during their tenure in the program.

#### **IIB7. CHANGE IN ADVISORY COMMITTEE**

MS students may change the composition of their Advisory Committee, including the major professor. Changes in the Advisory Committee composition must be approved by the Graduate Studies Coordinator and Department Chair. Changing the composition of the Committee may lead to a delay in graduation and wholesale change in thesis research. Requests for change in Advisory Committee membership late in a student's program are strongly discouraged.

The new Advisory Committee may require additional course work. If the student has taken the comprehensive examination prior to the change in Advisory committee, the student may be asked to take the examination from the new member(s). If the thesis proposal (BIOL 7102) has been taken and scored satisfactorily prior to the committee change, the new committee may require the student to present an additional thesis proposal seminar. This presentation will include any additional research required by the new membership of the Advisory Committee.

Students must promptly document the changes in the advisory committee composition by including the change on the "Thesis/Dissertation Faculty Committee Appointment Form" that they initially filled in (see **section IIB6**). The change must be approved by the Department Chair, Graduate Studies Coordinator, College Director of Graduate Studies and Graduate School. The Graduate School then archives the revised form.

Generally, switching mentors is discouraged and should only occur under extenuating circumstances. Changing labs is likely to lengthens the student's time to graduation. When a change in mentor is being considered, the decision process should involve a discussion between the student, the student's current mentor and the prospective mentor. The Graduate Studies Committee is then petitioned with a request for switching mentor. Upon discussion with all parties involved, the Graduate Studies Committee will vote on whether the request should be granted. If the request is granted, the "Thesis/Dissertation Faculty Committee" form (if one has already been filled out) must be amended to reflect the switch in mentor, and, if necessary, changes in other committee members. Upon switching labs, students should transfer all research records to the lab they are leaving.

#### **IIB8. ANNUAL PROGRESS REPORT**

MS students must complete an Annual Progress Report in May or June of each year in residence. Students will discuss the report with their Major Professor who will write in the report their assessment of the student's progress. Students will then submit the report to the Graduate Studies Coordinator. Upon review of the report, the Graduate Studies Coordinator may require a meeting with the student alone or with the student and the student's major professor. Alternatively, students may require a meeting with the graduate coordinator to discuss their progress and any roadblock encountered during the year. The coordinator will write in the progress report his/her assessment of the student's progress and share these comments with the student and the major professor. Students and their Major Professor are encouraged to share the annual progress reports with students' advisory committee.

#### **IIB9. COMPREHENSIVE EXAM**

MS students are required to take and pass a written and oral comprehensive exam. Full-time MS students must take this exam no later than their fourth semester in residence. Students taking the comprehensive exam after the fourth semester in residence should petition the Graduate Studies Committee for an exception.

The student advisory committee decides whether the comprehensive exam should be taken before or after the proposal defense. If the comprehensive exam is taken after the proposal defense, the student will also have to pass the comprehensive exam in order to become eligible for candidacy.

There is no "comprehensive exam" course to enroll in before taking the comprehensive exam.

The comprehensive exam is administered by the student's Advisory Committee. The scope of this exam is broad and includes an assessment of student's knowledge of general biological principles as they pertain to the student's general field of research. The examination will be scheduled in consultation with the student's Advisory Committee. For the written component of the exam, a minimum of one-half day per evaluating committee member should be scheduled for the exam. The written component of the exam will be completed over no more than 6 business days.

Students pass the exam when all voting members of the Advisory Committee, or all voting members but one, give a "Pass" grade.

Students who do not pass the comprehensive exam will be given the opportunity of a repeat. A second failure results in termination from the program. This decision can be appealed by petitioning the Graduate Studies Committee. The next level of appeal is the Department Chair.

At the oral component of the comprehensive exam, students must bring the "Comprehensive Exam Results Form" available at:

https://www.memphis.edu/gradschool/pdfs/forms/compexamresults.pdf. At the completion of the oral component of the comprehensive exam, each advisory committee member must sign the form and fill in the Pass/Fail grade. Students must then make

three copies of the form, one for themselves, one for the major professor and one for the department. Finally, students must promptly bring the form to the College of Arts and Sciences for signature by the College Director of Graduate studies. The college then forward the form to the Graduate School for final approval and the Graduate School archives the form.

After the comprehensive exam, each advisory committee member should fill in the "Milestone Evaluation" form and send it to the Graduate Studies Coordinator or to the Graduate Program administrative assistant.

### **IIB10. PROPOSAL DEFENSE EXAM (BIOL 7102)**

(Note that this exam is also sometime called "Prospectus Exam"). Students must enroll in BIOL 7102 on the semester they plan on taking the proposal defense exam. Full-time MS students must take this exam no later than the end of their fourth semester in residence. Students taking the proposal defense exam after the fourth semester in residence should petition the Graduate Studies Committee for an exception.

As part of the proposal defense exam, students will submit to their Advisory Committee a written research proposal in the form of an NSF or NIH grant application. The proposal will detail the research planned for completion of the MS degree. Human or animal research requires prior approval from relevant University review committees <a href="http://www.memphis.edu/researchsupport/compliance.php">(http://www.memphis.edu/researchsupport/compliance.php</a>). Animal research is subject to regulation by the Institutional Animal Care and Use Committee (IACUC) (<a href="https://www.memphis.edu/research/researchers/compliance/iacuc\_protocol.pdf">https://www.memphis.edu/research/researchers/compliance/iacuc\_protocol.pdf</a>). In the case of research involving human subjects, review of the proposed research is conducted by the Institutional Review Board (IRB).

A public seminar is scheduled once students deliver their written proposal to each member of the Advisory Committee. This seminar is scheduled for at least two weeks after the Advisory Committee receives the written proposal and must be announced to the Department at least seven days in advance. At the end of the seminar, all but the student's Advisory Committee are excused. Students are then questioned by their Advisory Committee on the scientific significance and experimental design of their research proposal. At the end of this questioning period, the student is excused, and the Advisory Committee evaluates the candidate's performance. Students pass the exam when all voting members of the Advisory Committee, or all voting members but one, give a "Pass" grade.

At the oral component of the proposal defense exam, MS students must bring the "Thesis or Dissertation Proposal Defense" form available at: <a href="https://www.memphis.edu/gradschool/pdfs/forms/tdproposal.pdf">https://www.memphis.edu/gradschool/pdfs/forms/tdproposal.pdf</a>. At the completion of the oral component of the proposal defense exam, each advisory committee member must sign the form and fill in the Pass/Fail grade. After, the Department Chair and Graduate Studies coordinator must also sign the form. Students must then make three copies of the form, one for themselves, one for the major professor and one for the department. Finally, students must promptly bring the form to the College of Arts and Sciences for signature by the College Director of Graduate studies. The College then

forwards the form to the Graduate School for final approval and the Graduate School archives the form.

After the proposal exam, each advisory committee member must fill in the "Milestone Evaluation" form and send it to the Graduate Studies Coordinator or to the Graduate Program administrative assistant.

#### **IIB11. ELIGIBILITY FOR STIPEND RAISE**

Students who are in good academic standing are eligible for a stipend raise once they have successfully passed BIOL 7000, BIOL 7004, comprehensive exam, BIOL 7102 and at least 50% of the elective class credits. They must also have passed the required credits of BIOL 7200 and of at least 6 credits of BIOL 7092. Students should direct their request for stipend increase to the Graduate Studies Coordinator who will grant the request after having verified that the requirements have been met.

#### IIB12. CANDIDACY

To become candidates, students must request approval of candidacy by submitting a petition to the Graduate Studies Coordinator, Department Chair, and Graduate School. This is done by filling in the "Candidacy Form" through the Docusign utility which can be accessed at:

https://www.memphis.edu/gradschool/resources/candidacy\_form.php?src=m.php.

#### Approval of candidacy at the departmental level is based on the following:

- A. Formation of an Advisory Committee.
- B. Satisfactory completion of BIOL 7000, BIOL 7004, all elective classes, 3 credit hours of BIOL 7200, 6 credit hours of BIOL 7092, BIOL 7102 and at least 6 credits of BIOL 7996.
- C. Have taken a minimum of 70% of the total required hours as 7000-level courses (https://www.memphis.edu/gradschool/resources/howmdc.php).
- D. Students wishing to substitute a course for a required course must have the approval of their major professor, Graduate Studies Committee, and Department Chair. The students must then submit the Course Substitution Form
- (<u>https://www.memphis.edu/gradschool/pdfs/forms/coursesubstitution.pdf</u>), which must accompany the candidacy form.
- D. Satisfactory completion of the Comprehensive Exam.
- E. Satisfactory completion of the Proposal Exam (BIOL 7102).
- F. A cumulative GPA of 3.0 on all coursework listed on the candidacy form as well as any other graduate work undertaken at The University of Memphis within the specified time limit. Grades of "D" or "F" are not accepted for any graduate degree credit, but these grades will be computed in the GPA. No more than seven (7) hours of "C+," "C," or "C-" will be counted toward degree requirements
- (<u>https://www.memphis.edu/gradschool/resources/howmdc.php</u>) . Grades earned in the final semester may not be used to correct GPA deficiencies.
- G. The student's graduate work up to this point must be acceptable in quality and

quantity to the Major Advisor, Advisory Committee, Graduate Studies Coordinator, and Department Chair.

#### Approval of candidacy at the graduate school levels is based on the following:

- A. Department and College approval.
- B. Meeting all the graduate school requirements for becoming a candidate.
- C. Having the "Thesis/Dissertation Faculty Committee Appointment Form", "Comprehensive Exam Results Form" and "Thesis or Dissertation Proposal Defense" on file by the Graduate School.

Students who have questions about graduate school candidacy approval should direct their request to the Graduate Analyst Ms. Jennifer Beech (jgbrooks@memphis.edu)

Once students become candidates, they enroll for Biology 7996 each academic semester until the thesis is completed, even if it brings the total number of credits hours above the 30 required by the MS program. At least 6 credit hours of post-candidacy thesis research (BIOL 7996) must be completed after the student becomes a candidate and no more than 6 credit hours of BIOL 7996 will be counted toward the degree. See **section IIB2** for the criteria for being a full-time student after becoming a candidate.

#### **IIB13. WRITING THE THESIS**

Prior to defending the thesis, it is the responsibility of MS students to notify the Graduate Analyst Ms. Jennifer Beech (<a href="mailto:igbrooks@memphis.edu">igbrooks@memphis.edu</a>) of any changes in name and address that has occurred since they started in the program.

A written thesis is required for all candidates to the MS degree. The thesis committee serves as the peer reviewers for the thesis. The thesis document should be prepared and presented to the Advisory Committee in the following manner:

1. Write a draft of the thesis and revise it according to the suggestions of the major professor. Usually several rounds of revision are required before the thesis draft can be submitted to the members of the thesis committee.

The thesis draft must be formatted in accordance with Graduate School policies regarding format and font size. These policies are described in: https://www.memphis.edu/gradschool/current\_students/tdguide\_preparation.php.

The candidate is responsible for proofreading and correcting the draft to be submitted to the members of the Thesis Graduate Committee.

2. Obtain major professor's approval to submit the final thesis draft to the Advisory Committee for critical review. This draft must be submitted to the members of the Thesis Advisory Committee at least three weeks before the date of the thesis defense.

#### **IIB14. THESIS DEFENSE**

MS students ready to defend their thesis must be enrolled during the semester of the defense and must sign up for BIOL 7600. Students defending in the Summer semester must be enrolled during that semester.

To defend the thesis, the "Application for Admission to Candidacy for the Master's Degree" form must be approved (see **section IIB12**) and an Intent to Graduate Card

must be filled in and submitted before the deadline set by the Graduate school <a href="https://www.memphis.edu/gradschool/current\_students/graduation\_information/graduation\_on\_deadlines.php">https://www.memphis.edu/gradschool/current\_students/graduation\_information/graduation\_on\_deadlines.php</a>. Students must have at least a 3.0 cumulative GPA in all graduate work at the time the "Intent to Graduate Card" is filed. Requests to graduate after semester deadline carry a fee and are rarely entertained, but if necessary, they are submitted to the Graduate School using this form:

https://www.memphis.edu/gradschool/pdfs/forms/lategraduationrevised.pdf.

The Thesis Defense includes a thesis defense seminar in which the student presents their thesis research and discusses its scientific significance for biological sciences. This seminar must be announced to the Department at least seven days in advance. The announcement must include: the thesis title, the date and location of the thesis seminar, the degrees of the candidate, a written abstract of ~250 words and the composition of the committee. This seminar is open to the public.

The public thesis seminar is followed by a period in which the candidate entertains questions from the general audience (faculty, students, and guests). After this, all but the student's Advisory Committee are excused. The candidate is then questioned by the Advisory Committee on aspects on the thesis research results and on the general scientific significance of these results. At the end of this questioning period, the candidate is excused, and the Advisory Committee evaluates the candidate's performance on the defense as follows:

<u>Full Pass</u>: All or all but one Advisory Committee voting members voting pass.

Conditional Pass: An agreement by the Advisory Committee voting members that the student has neither failed nor satisfactorily passed the examination. Remedial conditions must be stipulated by the Advisory Committee and may include either further course work or a retaking of a portion or portions of the exam. In the former case, the courses and final grade required must be designated in writing. In the latter case, a time for re- examination (no less than 30 days) will be determined by the student and the Committee. In either case, a failure to complete the agreed upon requirements will signify that the entire examination has been failed and must be retaken as noted under "Full Fail".

<u>Full Fail</u>: Two or more of the voting committee members voting fail. The student may retake the entire examination only once. A time for re-examination (no less than 30 days from the date of the first examination) will be determined by the student and the Committee.

Students must bring to their thesis defense the "Thesis/Dissertation Final Defense Results Form" form which is available at:

https://www.memphis.edu/gradschool/pdfs/forms/tddefense2.pdf. At the completion of the thesis defense exam, each member of the advisory committee must sign the form and fill in the Pass/Fail grade. Students must then make three copies of the form, one for themselves, one for the major professor and one for the department. Finally, students must promptly bring the form to the College of Arts and Sciences for signature by the College Director of Graduate studies. The College then forwards the form to the

Graduate School for final approval and the Graduate School archives the form.

After the thesis exam each advisory committee member must fill in the "Milestone Evaluation" form and send it to the Graduate Studies Coordinator or to the Graduate Program administrative assistant.

Students with a Full or Conditional Pass must revise their thesis draft according to the suggestions made by each Advisory Committee member. This will entail submission of rewritten drafts to the committee members. Once the students obtain approval of all the members of the Thesis Advisory Committee on a final thesis document, they must submit to the Graduate School the following forms and documents:

- 1) "Final Committee Approval Form for Electronic Submission", which can be found on:
  - https://www.memphis.edu/gradschool/pdfs/etd\_approval\_form.pdf
- 2) "Thesis/Dissertation Checklist" which can be found on: <a href="https://www.memphis.edu/gradschool/pdfs/thesis\_dissertation\_checklist.p">https://www.memphis.edu/gradschool/pdfs/thesis\_dissertation\_checklist.p</a> <a href="mailto:df">df</a>.
- 3) Electronically submit the final thesis document using the ETD system or to ProQuest system as described on: <a href="https://www.memphis.edu/gradschool/current\_students/tdguide.php">https://www.memphis.edu/gradschool/current\_students/tdguide.php</a>.
  This process is also described under heading 8 in <a href="https://www.memphis.edu/gradschool/current\_students/tdguide\_preparation.php#binding">https://www.memphis.edu/gradschool/current\_students/tdguide\_preparation.php#binding</a>

Students wishing to have bound copies of their final thesis document may contact: J & K Bindery, 4602 Quince Road, Memphis, TN 38117, Phone: (901) 685-0446.

Upon successful completion of all degree requirements, the Advisory Committee and College Director of Graduate Studies will recommend to the Graduate School awarding the Master's degree by the University of Memphis.

#### IIB15. Grading BIOL 7996 and BIOL 7600

BIOL 7996 will receive "IP" (In Progress) grades for each semester it is in progress. In the final semester the course is taken an "IP" will be on the course until BIOL 7600 is passed or failed. At that time, the major professor submits a grade change form noting the last BIOL 7996 course taken needs to be "SA" or "U" reflective of the given student's achievement in BIOL 7600. The grade change form is located on: https://www.memphis.edu/registrar/pdf-docs/forms/gc\_form.pdf

BIOL 7600 will receive "IP" (In Progress) grades for each semester it is in progress. If the student passes in the initial semester enrolled, the student will receive an "S". If the student needs to defend again in a future semester (or needs more time to complete their defense), the student will need to be given an "IP" for the initial semester(s) and an "S" (if completed satisfactorily) in the last semester the course is taken (i.e. when the thesis is defended).

#### IIB16. Graduation

Students who are graduating will receive an email from the Graduate School explaining the graduation ceremony requirements about one month prior to graduation.

Information on ordering the cap and gown can be found on: <a href="https://www.memphis.edu/commencement/apply/cap-and-gown-order.php">https://www.memphis.edu/commencement/apply/cap-and-gown-order.php</a>

## **IIB17. Timeline for MS In Biological Sciences**

A minimum of 30 credit hours beyond the baccalaureate degree is required to obtain the MS degree.

Semester	Program requirements	# CR Hours	Student needs to:	CR left to take
Fall Semester of year 1	BIOL 7000 (Orientation to Graduate Studies).	2	Sign up for BIOL 7000 in semester 1 or 2 (BIOL 7000 is offered only in the Fall).	28
Fall semester of year 1	BIOL 7004 (College Biol Teaching).	1	Sign up for BIOL 7004 in semester 1 or 2 (BIOL 7004 is offered only in the Fall).	27
Semester 2	Form a thesis committee comprising your major Professor and at least 3 other voting members.	0	Discuss committee composition with major Professor and contact potential committee members to obtain their consent.  Fill in and submit Thesis Committee Appointment form.	27
Once every academic year	Meet with thesis committee to discuss progresses.	0	Schedules meeting after consulting with the major Professor.	27
End of each Spring semester	Fill in the Graduate student progress form and send it to the Graduate Studies Coordinator. Meet with Graduate Studies Coordinator if needed	0	Fill in form and schedule meeting with Graduate Studies Coordinator if needed.	27
Semesters 1, 2, and 3	BIOL 7200 (Seminar in Biology). Must take 3 CR of BIOL 7200. BIOL 7200 CR taken beyond those 3 CR	1 CR per sem.	Sign up for 1 CR BIOL 7200 each semester for at least 3 semesters.	26

	will not count toward the total 30 hours. In semesters when students don't have to sign up for BIOL 7200, they should still present and attend seminars as this is helps to monitor their progress and keep up with departmental research.			
Semesters 1, 2, 3 and 4 (and 5 if needed).	Take 11 CR of 7000 or 6000 elective quality point courses*. CR taken beyond those 11 CR will not count toward the total 30 hours.	Each course counts for a different # of CR.	Consult with your major Professor to decide what courses to take. Course load may be apportioned in different manners, but as general guidance students should sign up for 2-3 hours per semester for 3-4 sem. Sign up for the courses as decided.	15
Semesters 1, 2, 3 or as decided in consultation with major Professor.	BIOL 7092 Research (pre-proposal research). Must take 6 CR of BIOL 7092. BIOL 7092 CR taken beyond those 6CR will not count toward the total 30 hours.	Consult with major Professor to decide how many CR of BIOL 7092 to take each semester before candidacy.	Sign up for BIOL 7092 as discussed with your major Professor. BIOL 7092 load may be apportioned in different manners, but as general guidance students should sign up for 2CR for 3 semesters.	9
Semester 3 or 4	Comprehensive exam	0	Consult with committee members about the topic of the exam.  After the exam: fill in and submit  Comprehensive Exam	9

			form. Also, each committee member should fill in Milestone forms and send to the graduate coordinator or graduate program administrative assistant.	
Semester 3 or 4	BIOL 7102 (Thesis proposal)	2	Sign up for BIOL 7102. Consult with major Professor as needed about the exam format and to set up an exam date. After the exam: fill in and submit the Thesis or Dissertation Proposal Defense form. Each of the Committee members should fill in the Milestone form and send it to the Graduate Studies Coordinator.	7
students in good have passed the	d academic standing car	n submit a reques	2 and the comprehensive e t for stipend raise. Student IOL 7092 (pre-proposal res	s who
Semesters 4 or 5 or 6 or 7 as decided after consultation with major Professor.	BIOL7996 Thesis research. A minimum of 6 CR must be taken to meet program requirement. Hours taken beyond those 6CR will not count toward the total 30 hours.	Consult with major Professor to decide how many CR of BIOL 7996 to take each semester after candidacy.	Sign up for BIOL 7996 as discussed with your major Professor. Students must enroll for BIOL 7996 CR each academic semester until the thesis is completed, regardless of how many hours the program will accept.	1
Semester of Graduation (ideally semester 6)	BIOL 7600 (seminar in Biology-Thesis defense). Fill in the Intent to Graduate Card with the graduate school.	1 CR	Consult in advance with primary Professor and committee members to set up a tentative date of graduation.  Sign up for BIOL 7600 on the tentative	0

Read all instructions from the graduate school about graduation process and requirements**.	semester of graduation. Submit the Master's Degree Candidacy form. File the Intent to Graduate Card with the Graduate School.	
	Each of the Committee members should fill in the Milestone form and sent it to the Graduate Studies Coordinator or to the graduate program administrative assistant.	

 $<sup>^{\</sup>star}$  70 % (8 CR) of the elective courses must be taken at the 7000 level and a minimum of 7 CR must be in the major.

https://www.memphis.edu/gradschool/current\_students/graduation\_information/graduation.php

Make sure to scroll all the way down to this webpage and click on: "How to Apply to Graduate".

# IIC. NON-THESIS MASTER (nt-MS) OF SCIENCES DEGREE REQUIREMENTS

See **section IIC11** of this Handbook for a timeline checklist summarizing the information about the requirements for the nt-MS in Biological Sciences program.

#### **IIC1. TIME FOR DEGREE COMPLETION**

For full-time students, all requirements for graduating with an nt-MS should generally be completed within three years of continuous enrollment. Exceptions to this requirement can be made by petitioning the Graduate Studies Committee.

#### **IIC2. FULL-TIME STATUS**

nt-MS students are considered full-time when signing up for 9 credit hours per semester.

#### **IIC3. nt-MS PROGRAM REQUIREMENTS**

- 1. A minimum of 36 credit hours of graduate courses is required. Credit hours counting toward the degree must be in STEM or STEM education courses.
- 2. Seventy percent of the 36 semester hours (i.e., a minimum of 25 hours) must be at the 7000 level or above and a minimum of 18 hours in the major is required.

<sup>\*\*</sup> Instruction from the graduate school are found on:

- The student's Advisory Committee may require additional courses that will bring the number of credit hours above 36.
- 3. Students must earn at least a "B" or "S" (Satisfactory) on all graduate course required by the Department of Biological Sciences or by the student's Advisory Committee.
- 4. Students are allowed to repeat graduate courses only one time and no more than two courses may be repeated. Approval to repeat a course must be obtained from the Graduate Studies Committee in consultation with the student's Advisory Committee.
- 5. A cumulative grade point average of 3.0 must be maintained. Students whose grade point average drops below 3.0 will have one semester to raise their GPA to 3.0 or better. Continuation of a students who fails to reach a 3.0 overall GPA during two consecutive semesters while in the graduate program is at the discretion of the Graduate Studies Committee in consultation with the student's Advisory Committee.
- 6. Mandatory courses include <u>BIOL 7000</u> (Orientation to Graduate Studies), <u>BIOL 7004</u> (College Biology Teaching), and 3 credit hours of <u>BIOL 7200</u> (Seminar in Biology). BIOL 7000 and BIOL 7004 must be completed during the first year of residence. nt-MS students are not expected to present in BIOL 7200, but their attendance at the BIOL 7200 seminars is mandatory. No more than 3 semester hours can be satisfied by <u>BIOL 7092</u> (Research).
- 7. nt-MS students must take and pass a written and oral Comprehensive Examination, administered by students' advisory committee usually before the end of students' last semester in residence. The scope of this examination is broad and includes a review of general biological principles.

#### **IIC4. TRANSFER OF UNDECLARED MAJOR CREDITS**

Nt-MS students who have successfully completed 7000 level courses while being undeclared majors at the University of Memphis Graduate School may apply up to nine credits of these course to their graduate degree, if this is approved by their Advisory Committee and the Graduate School.

To transfer undeclared major credits students must use this form: https://www.memphis.edu/gradschool/pdfs/forms/doctoral\_transfer\_credit.pdf.

#### IIC5. SWITCHING CLASSES AND REQUESTS FOR GRADE CHANGE

To switch out a class, students should first sign up for the new class and then sign out from the class to be replaced. Otherwise there will be a late charge associated with the switch.

Requests for grade change are carried out by filling in and following the instructions on this form: <a href="https://www.memphis.edu/registrar/pdf-docs/forms/gc">https://www.memphis.edu/registrar/pdf-docs/forms/gc</a> form.pdf.

#### **IIC6. ADVISORY COMMITTEE**

During the first year in the program, nt-MS students and their advisor (major professor)

will form an Advisory Committee. The Advisory Committee will comprise three faculty members who will vote Pass or Fail on the nt-MS students' comprehensive exam. The Advisory Committee will include the major professor and two other voting graduate faculties. Additional, non voting, members may also be part of the Advisory Committee. At least two of the three voting Advisory Committee members must be from the Department of Biological Sciences at The University of Memphis. Only one voting committee member may be from outside the University. This member should apply to the graduate school

(https://www.memphis.edu/gradschool/resources/gfs\_app\_instructions.php) for affiliate or adjunct graduate faculty member status. At least two of the voting Advisory Committee members must be from the Department of Biological Sciences at The University of Memphis. Only one affiliate or adjunct graduate faculty member may serve as a voting member of the Advisory Committee.

If necessary, committee members may be added, replaced or removed (see **section IIC7**).

When the committee is formed or at the first committee meeting, students must fill in the "Thesis/Dissertation Faculty Committee Appointment Form" available at: <a href="https://www.memphis.edu/eece/programs/docs/td">https://www.memphis.edu/eece/programs/docs/td</a> committee form.pdf. Changes in the advisory committee composition must be promptly documented on the same form. After having the committee members, Department Chair and Graduate studies coordinator sign the form, students must make three copies of the form, one for themselves, one for the major professor and one for the department. Finally, students must promptly bring the form to the College of Arts and Sciences for signature by the College Director of Graduate studies. The college then forwards the form to the Graduate School for final approval and the Graduate School archives the form.

All three voting members of the student's Advisory Committee must be physically or remotely (through skype or other similar remote communication electronic software) present in oral component of the comprehensive exam.

Students should meet with their Advisory Committee at least once a year to review students academic progress. Students may call for a meeting of the Advisory Committee to discuss any roadblock encountered during their studies.

#### **IIC7. CHANGES IN ADVISORY COMMITTEE**

nt-MS students may change the composition of their Advisory Committee, including the major professor. Changes in the Advisory Committee composition must be approved by the Graduate Studies Coordinator and Department Chair. Changing the composition of the Committee may lead to a delay in graduation. Requests for change in Advisory Committee membership late in a student's program are strongly discouraged.

The new Advisory Committee may require additional course work. If the student has taken the comprehensive examination prior to the change in Advisory committee, the student may be asked to take the examination from the new member(s).

Students must promptly document the changes in the advisory committee composition

by including the change on the "Thesis/Dissertation Faculty Committee Appointment Form" that they initially filled in (see **section IIC6**). The change must be approved by the Department Chair, Graduate Studies Coordinator, College Director of Graduate Studies and Graduate School. The Graduate School then archives the revised form. Generally, switching mentors is discouraged and should only occur under extenuating circumstances. Changing labs is likely to lengthens the student's time to graduation. When a change in mentor is being considered, the decision process should involve a discussion between the student, the student's current mentor and the prospective mentor. The Graduate Studies Committee is then petitioned with a request for switching mentor. Upon discussion with all parties involved, the Graduate Studies Committee will vote on whether the request should be granted. If the request is granted, the "Thesis/Dissertation Faculty Committee" form (if one has already been filled out) must be amended to reflect the switch in mentor, and, if necessary, changes in other committee members. Upon switching labs, students should transfer all research records to the lab they are leaving.

#### **IIC8. ANNUAL PROGRESS REPORT**

All nt-MS students will complete an Annual Progress Report in May or June of each year in residence. Students will discuss the report with their Major Professor who will write in the report their assessment of student's progress. Students will then submit the report to the Graduate Studies Coordinator. Upon review of the report, the Graduate Studies Coordinator may require a meeting with only the student alone or with the student and the student's major professor. Alternatively, graduate students may require a meeting with the graduate coordinator. The coordinator will write in the report their assessment of the student's progress and share these comments with the student and the student's major professor.

#### **IIC9. COMPREHENSIVE EXAM**

nt-MS students are required to take and pass a written and oral comprehensive exam. Full-time nt-MS students must take this exam no later than their fourth semester in residence. Students taking the comprehensive exam after the fourth semester in residence should petition the Graduate Studies Committee for an exception.

There is no "comprehensive exam" course to enroll in before taking the comprehensive exam.

The comprehensive exam is administered by the student's Advisory Committee. The scope of this exam is broad and includes an assessment of student's knowledge of general biological principles. The exam will be scheduled in consultation with the student's Advisory Committee. For the written component of the exam, a minimum of one-half day per evaluating committee member should be scheduled for the exam. The written component of the exam should be completed over no more than 6 business days.

Students pass the exam when all voting members of the Advisory Committee, or all voting members but one, give a "Pass" grade.

Students who do not pass the comprehensive exam will be given the opportunity of a repeat. A second failure results in termination from the program. This decision can be appealed by petitioning the Graduate Studies Committee. The next level of appeal is the Department Chair.

At the oral component of the comprehensive exam, students must bring the "Comprehensive Exam Results Form" available at:

https://www.memphis.edu/gradschool/pdfs/forms/compexamresults.pdf. At the completion of the oral component of the comprehensive exam, each advisory committee member must sign the form and fill in the Pass/Fail grade. Students must then make three copies of the form, one for themselves, one for the major professor and one for the department. Finally, students must promptly bring the form to the College of Arts and Sciences for signature by the College Director of Graduate studies. The college then forwards the form to the Graduate School for final approval and the Graduate School archives the form.

After the comprehensive exam, each advisory committee member should fill in the "Milestone Evaluation" form and send it to the Graduate Studies Coordinator or to the Graduate Program administrative assistant.

#### **IIC10. GRADUATION**

In the semester of graduation, it is the responsibility of nt-MS students to notify the Graduate Analyst Ms. Jennifer Beech (jgbrooks@memphis.edu) of any changes in name and address that has occurred since they started in the program.

nt-MS students who have met all the program requirement must complete the "Candidacy Form" through the Docusign utility which can be accessed at: <a href="https://www.memphis.edu/gradschool/resources/candidacy\_form.php?src=m.php">https://www.memphis.edu/gradschool/resources/candidacy\_form.php?src=m.php</a>. The "Intent to Graduate Card" must also be filled in and submitted before the deadline set by the Graduate school (available at:

https://www.memphis.edu/gradschool/current\_students/graduation\_information/graduation\_deadlines.php).

Upon successful completion of all degree requirements, the Advisory Committee and College Director of Graduate Studies will recommend to the Graduate School awarding the Master's degree by The University of Memphis.

nt-MS students who are graduating will receive an email from the Graduate School explaining the graduation ceremony requirements about one month prior to graduation.

Information on ordering the cap and gown can be found on: <a href="https://www.memphis.edu/commencement/apply/cap-and-gown-order.php">https://www.memphis.edu/commencement/apply/cap-and-gown-order.php</a>.

# IIC11. Timeline For non-thesis MS In Biological Sciences

A minimum of 36 credit hours beyond the baccalaureate degree is required to obtain the nt-MS degree.

Semester	Program requirement	# CR Hours	Student needs to:	CR left to take
Fall semester of year 1	BIOL 7000 (Orientation to graduate studies).	2	Sign up for BIOL 7000 in semester 1 or 2 (BIOL 7000 is offered only in the Fall).	34
Fall semester of year 1	BIOL 7004 (College Biol teaching).	1	Sign up for BIOL 7004 in semester 1 or 2 (BIOL7004 is offered only in the Fall).	33
Semester 1 or 2	Form a thesis committee comprising your Major professor and at least 2 other voting members.	0	Discuss the committee composition with Major professor and contact potential committee members to obtain their consent. Fill in and submit Thesis Committee Appointment form.	33
Once every academic year	Meet with thesis committee to discuss student's progresses.	0	Schedule committee meeting after consulting with the major Professor.	33
End of each Spring semester	Fill in the Graduate student progress form and send it to the Graduate Studies Coordinator. Meet with Graduate Studies Coordinator if needed.	0	Fill in progress form and if needed schedule meeting with Graduate Studies Coordinator.	33
Semesters 1, 2, and 3	BIOL 7200 (Seminar in Biology): nt-MS students must attend but don't have to present. Must take 3 CR of	1 CR per sem.	Sign up for 1 CR BIOL 7200 per semester for 3 semesters.	30

	BIOL 7200. BIOL 7200 CR taken beyond those 3 CR will not count toward total 36 hours. In semesters when students don't have to sign up for BIOL 7200, they should still present and attend seminars as this is helps to monitor their progress and keep up with departmental research.			
Semesters 2, 3, 4 or as decided in consultation with advisor	BIOL 7092 (Research) Must take 3 CR of BIOL 7092. BIOL 7092 taken beyond those 3 CR will not count toward the total 36 hrs.	Consult with major Professor to decide on the # or CR of BIOL 7092 to take each semester.	Sign up for BIOL 7092 as decided with your major advisor.  The hours for BIOL 7092 can be apportioned in different manners, but as general guidance student should sign up for 1CR each semester for 3 semesters.	27
Semester 4 or 5	Comprehensive exam.	0	Consult with committee members about the topic of the exam.  After the exam: fill in and submit Comprehensive Exam form.  Have each of the committee members fill in the milestone form and sent to the Graduate Coordinator or graduate program administrative assistant.	27
Semesters 1,	Take 27CR of 7000	Each	Consult with the major	27

2, 3 and 4 (and 5 if needed).	or 6000 elective courses*. Credits taken beyond those 27CR will not count toward the total 36 hours.	course counts for a different # of CR.	Professor to decide what course to take. Course load may be apportioned in different manners, but as a rule of thumb students should sign up for 6-7 hours per semester for 4 semesters or 5-6 hours per semester for 5 semesters.	
Semester of graduation (ideally semester 4 or 5)	Student is ready to graduate after passing the comprehensive exam and fulfilling the 36 hours CR requirement with the course load outlined above. Complete the Master's Degree Candidacy form. Fill in the Intent to Graduate Card with the graduate school. Read all instructions from the graduate school about graduation process and requirements**.	0	Submit the Master's Degree Candidacy form for approval. File the Intend to Graduate Card with the Graduate School.	0

 $<sup>^{*}</sup>$  70 % (19 CR) of the elective courses should be taken at the 7000 level and a minimum of 15 CR should be in the major.

https://www.memphis.edu/gradschool/current\_students/graduation\_information/graduation.php

Make sure to scroll all the way down to this webpage and click on: "How to Apply to Graduate".

<sup>\*\*</sup> Instruction from the graduate school are found on:

#### IID. DOCTOR OF PHILOSOPHY (PhD) PROGRAM REQUIREMENTS

See **section IID19** of this Handbook for a timeline checklist summarizing the information about the requirements for the PhD in Biological Sciences program.

#### **IID1. TIME FOR DEGREE COMPLETION**

For full-time students, all requirements for graduating with a Ph.D. should generally be completed within five years of continuous enrollment. Exceptions to this requirement can be made by petitioning the Graduate Studies Committee.

#### **IID2. FULL-TIME STATUS**

Before passing all the pre-proposal exam requirements, PhD students are considered full-time when signing up for 9 credit hours per semester.

After passing all the pre-proposal exam requirements, PhD students are considered full-time when signing up for 6 credit hours per semester. Exceptions may apply to students on an F1 visa and on some fellowships may still have to sign up for 9 credit hours per semester.

After having completed all the 72 credit hours program course requirements, PhD students are considered full-time when signing up for 1 credit hour of BIOL 9000.

#### **IID3. PhD PROGRAM REQUIREMENTS**

- 1. A minimum of 72 credit hours is required beyond the baccalaureate degree. A minimum of 30 semester hours must be taken in residence.
- 2. Seventy percent of the 72 semester hours (i.e., a minimum of 50 hours) must be at the 8000 level or above and a minimum of 24 hours in the major is required. The student's Advisory Committee may require additional courses that will bring the number of credit hours above 72.
- 3. Students must earn at least a "B" or "S" (Satisfactory) on any graduate course required by the Department of Biological Sciences or by the student's Advisory Committee.
- 4. Student are not allowed to repeat a graduate course more than one time and no more than two courses may be repeated. Approval to repeat a course must be obtained from the Graduate Studies Committee in consultation with the student's Advisory Committee.
- 5. A cumulative grade point average of 3.0 must be maintained. Students whose grade point average drops below 3.0 will have one semester to raise their GPA to 3.0 or better. Continuation of students who fail to reach a 3.0 overall GPA during two consecutive semesters while in the graduate program is at the discretion of the Graduate Studies Committee in consultation with the student's advisory committee.
- 6. Mandatory courses include <u>BIOL 8000</u> (Orientation to Graduate Studies), <u>BIOL 8004</u> (College Biology Teaching), 9 credit hours of BIOL 8092 (Research), <u>BIOL 8103</u> (Dissertation Proposal), 5 credit hours of <u>BIOL 8200</u> (Seminar in Biology), 18 credit hours of <u>BIOL 9000</u> (Thesis Research), and <u>BIOL 8600</u> (Dissertation Defense Seminar). Attendance at departmental seminars is mandatory.

BIOL 8000 and BIOL 8004 must be completed during the first year of residence and BIOL 8600 in the last semester.

- 7. No more than 15 post-baccalaureate hours of 6000-level courses may be applied to a doctoral degree (https://www.memphis.edu/gradschool/resources/howddc.php).
- 8. Full-time PhD students should become candidates usually no later than the end of their fifth semester in residence. To become candidates they must have: (1) successfully passed BIOL 8000, BIOL 8004 and BIOL 8092; (2) successfully taken the written and oral Comprehensive Exam administered by the student advisory committee; the scope of this examination is broad and includes a review of general biological principles; (3) successfully taken the Research Proposal exam (BIOL 8103) which includes a written research proposal, a seminar on the research proposal and an examination of the research proposal by the student's thesis committee.
- 9. At least 18 credit hours of dissertation research (BIOL 9000) must be completed after the student becomes a candidate and no more than 18 credit hours of BIOL 9000 will be counted toward the degree. Students cannot register for BIOL 9000 until they have passed BIOL 8103 (Research Proposal). Once students enroll for BIOL 9000, they must enroll for BIOL 9000 credit each academic semester until the dissertation is completed, even if this brings the total number of credits hours above the 72 required.
- 10. At least one paper from the students' dissertation should be published, in press or accepted in a peer-reviewed journal prior to graduation. The student should be first author on that paper.
- 11. A written dissertation detailing the results of the student research. The dissertation must demonstrate mastery of scientific writing and of the techniques and intellectual process of scientific research.
- 12. A Final Examination including a public dissertation seminar (BIOL 8600). This usually takes place during the last semester in the program. The seminar will be announced and is open to the public. The final examination is conducted after the seminar by the student Advisory Committee. The advisory committee consists, insofar as possible, of the same graduate faculties involved in the Comprehensive and Proposal Examinations. Upon successful completion of the final examination and all degree requirements, the committee will recommend awarding the PhD degree.

#### **IID4. TRANSFER OF UNDECLARED MAJOR CREDITS**

PhD students who have successfully completed 8000 level courses while being undeclared majors at the University of Memphis Graduate School may apply up to nine credits of these course to their graduate degree, if this is approved by their Advisory Committee and the Graduate School.

#### **IID5. TRANSFER OF CREDITS FROM AN MS DEGREE**

PhD students with an MS degree obtained prior to their admission as PhD students may transfer up to 30 credits of the non-research classes taken during their MS studies. This transfer must be approved by their Advisory Committee and by the Graduate School. To transfer credits students must use this form:

https://www.memphis.edu/gradschool/pdfs/forms/doctoral\_transfer\_credit.pdf.

Students who transfer credit from a MS degree are not allowed to transfer undeclared major credits.

#### IID6. SWITCHING CLASSES AND REQUESTS FOR GRADE CHANGE

To switch out a class, students should first sign up for the new class and then sign out from the class to be replaced. Otherwise there will be a late charge associated with the switch.

Requests for grade change are carried out by filling in and following the instructions on this form: https://www.memphis.edu/registrar/pdf-docs/forms/gc\_form.pdf.

#### **IID7. ADVISORY COMMITTEE**

During the first year in the program, PhD students and their advisor (major professor) will form an Advisory Committee. The Advisory Committee will comprise five faculty members who will vote Pass or Fail on the student's comprehensive exam, proposal exam and final exam. The Advisory Committee will include the major professor and four other voting graduate faculties. At least four of the five voting Advisory Committee members must be from the Department of Biological Sciences at The University of Memphis. Only one voting committee member may be from outside the University. This member should apply to the graduate school

(https://www.memphis.edu/gradschool/resources/gfs\_app\_instructions.php) for affiliate or adjunct graduate faculty member. Additional, non-voting members may also be included in the Advisory Committee. Only one affiliate or adjunct graduate faculty member may serve as a voting member of the Advisory Committee.

If necessary, committee members may be added, replaced or removed (see **section IID8**).

When the committee is formed or at the first committee meeting, students must fill in the "Thesis/Dissertation Faculty Committee Appointment Form" available at: <a href="https://www.memphis.edu/eece/programs/docs/td\_committee\_form.pdf">https://www.memphis.edu/eece/programs/docs/td\_committee\_form.pdf</a>. The form must be signed by all committee members, the Department Chair and the Graduate Studies Coordinator. Students must then make three copies of the form, one for themselves, one for the major professor and one for the department. Finally, students must promptly bring the signed form to the College of Arts and Sciences where it will be signed by the College Director of Graduate studies. The college then forward the form to the Graduate School for final approval and the Graduate School archives the form

At least four voting members of the student's Advisory Committee must be physically or remotely (through skype or other similar remote communication electronic software) present during the oral component of these three exams: comprehensive, prospectus/proposal, and final.

PhD students should meet with their Advisory Committee at least once a year. During these meetings, the Advisory Committee will review the student's progress and advise on the experimental design and technical aspects of the research project. Students may call for an Advisory Committee meeting to discuss any roadblock encountered during

their tenure in the program.

#### **IID8. CHANGES IN ADVISORY COMMITTEE**

PhD students may change the composition of their Advisory Committee, including the major professor. Changes in the Advisory Committee composition must be approved by the Graduate Studies Coordinator and Department Chair. Changing the composition of the Advisory Committee may lead to a delay in graduation and wholesale change in dissertation research. Requests for change in Advisory Committee membership late in a student's program are strongly discouraged.

The new Advisory Committee may require additional course work. If the student has taken the comprehensive examination prior to the change in Advisory committee, the student may be asked to take the examination from the new member(s). If the thesis proposal (BIOL 8103) has been taken and scored satisfactorily prior to the committee change, the new committee may require the student to present an additional thesis proposal seminar. This presentation will include any additional research required by the new membership of the Advisory Committee. The student's new Committee will also determine any additional course work is needed.

Students must promptly document the changes in the advisory committee composition by including the change on the "Thesis/Dissertation Faculty Committee Appointment Form" that they initially filled in (see **section IID7**). The change must be approved by the Department Chair, Graduate Studies Coordinator, College Director of Graduate Studies and Graduate School. The Graduate School then archives the revised form.

Generally, switching mentors is discouraged and should only occur under extenuating circumstances. Changing labs is likely to lengthens the student's time to graduation. When a change in mentor is being considered, the decision process should involve a discussion between the student, the student's current mentor and the prospective mentor. The Graduate Studies Committee is then petitioned with a request for switching mentor. Upon discussion with all parties involved, the Graduate Studies Committee will vote on whether the request should be granted. If the request is granted, the "Thesis/Dissertation Faculty Committee" form (if one has already been filled out) must be amended to reflect the switch in mentor, and, if necessary, changes in other committee members. Upon switching labs, students should transfer all research records to the lab they are leaving.

#### **IID9. ANNUAL PROGRESS REPORT**

PhD students must complete an Annual Progress Report in May or June of each year in residence. Students will discuss the report with their major professor who will write in the report their assessment of the student's progress. Students will then submit the report to the Graduate Studies Coordinator. Upon review of the report, the Graduate Studies Coordinator may require a meeting with the student only or with the student and the student's major professor. Alternatively, students may require a meeting with the graduate coordinator to discuss their progress and any roadblock encountered during the year. The coordinator will write in the progress report their assessment of the student's progress and share these comments with students and their major professor.

Students and their major professor are encouraged to share the annual progress reports with the students' advisory committee.

#### **IID10. COMPREHENSIVE EXAM**

PhD students are required to take and pass a written and oral Comprehensive Examination. Full-time PhD students must take this exam no later than their fifth semester in residence. Students taking the comprehensive exam after the fifth semester in residence should petition the Graduate Studies Committee for an exception.

The student advisory committee decides whether the comprehensive exam should be taken before or after the proposal defense. If the comprehensive exam is taken after the proposal defense, the student will also have to pass the comprehensive exam in order to become eligible for candidacy.

There is no "comprehensive exam" course to enroll in before taking the comprehensive exam.

The comprehensive examination is administered by the student's Advisory Committee. The scope of the comprehensive exam is broad and includes an assessment of student's knowledge of general biological principles as they pertain to their general field of research. The comprehensive exam will be scheduled in consultation with the student's Advisory Committee. For the written component of the exam, a minimum of one-half day per evaluating committee member should be scheduled for the exam. The written component of the exam will be completed over no more than a 10 business days period.

Students pass the comprehensive exam when all voting members of the Advisory Committee, or all voting members but one, give a "Pass" grade.

Students who do not pass the comprehensive exam will be given the opportunity of a repeat. A second failure results in termination from the program. This decision can be appealed by petitioning the Graduate Studies Committee. The next level of appeal is the Department Chair.

At the oral component of the comprehensive exam, students must bring the "Comprehensive Exam Results Form" available at:

https://www.memphis.edu/gradschool/pdfs/forms/compexamresults.pdf. At the completion of the oral component of the comprehensive exam, each advisory committee member must sign the form and fill in the Pass/Fail grade. Students must then make three copies of the form, one for themselves, one for the major professor and one for the department. Finally, students must promptly bring the form to the College of Arts and Sciences for signature by the College Director of Graduate studies. The college then forward the form to the Graduate School for final approval and the Graduate School archives the form.

After the comprehensive exam, each advisory committee member must fill in the "Milestone Evaluation" form and send it to the Graduate Studies Coordinator or to the Graduate Program administrative assistant.

#### **IID11. PROPOSAL DEFENSE EXAM (BIOL 8103)**

(Note that this exam is also sometime called "Prospectus Exam"). Students must enroll in BIOL 8103 on the semester they plan on taking the proposal defense exam. Full-time PhD students should take this exam no later than the end of their fifth semester in residence. Students taking the proposal defense exam after the fifth semester in residence should petition the Graduate Studies Committee for an exception.

As part of the proposal defense exam, students will submit to their Advisory Committee a written research proposal in the form of an NSF or NIH grant application. The written proposal will detail the research planned for completion of the PhD degree. Human or animal research requires prior approval from relevant University review committees <a href="http://www.memphis.edu/researchsupport/compliance.php">(http://www.memphis.edu/researchsupport/compliance.php</a>). Animal research is subject to regulation by the Institutional Animal Care and Use Committee (IACUC) (<a href="https://www.memphis.edu/research/researchers/compliance/iacuc\_protocol.pdf">https://www.memphis.edu/research/researchers/compliance/iacuc\_protocol.pdf</a>). In the case of research involving human subjects, review of the proposed research is conducted by the Institutional Review Board (IRB).

A public seminar is scheduled once students deliver their written proposal to each member of the Advisory Committee. This seminar is scheduled for at least two weeks after the Advisory Committee receives the written proposal and must be announced to the Department at least seven days in advance. At the end of the seminar, all but the student's Advisory Committee are excused. Students are then questioned by their Advisory Committee on the scientific significance and experimental design of their proposed research. At the end of this questioning period, the student is excused, and the Advisory Committee evaluates the candidate's performance. Students pass the exam when all voting members of the Advisory Committee, or all voting members but one, give a "Pass" grade.

At the oral component of the proposal defense exam, PhD students must bring the "Thesis or Dissertation Proposal Defense" form available at:

<a href="https://www.memphis.edu/gradschool/pdfs/forms/tdproposal.pdf">https://www.memphis.edu/gradschool/pdfs/forms/tdproposal.pdf</a>. At the completion of the oral component of the proposal defense exam, each advisory committee member must sign the form and fill in the Pass/Fail grade. After, the Department Chair and Graduate Studies coordinator must also sign the form. Students must then make three copies of the form, one for themselves, one for the major professor and one for the department. Finally, students must promptly bring the form to the College of Arts and Sciences for signature by the College Director of Graduate studies. The College then forwards the form to the Graduate School for final approval and the Graduate School archives the form.

After the proposal exam, each advisory committee member must fill in the "Milestone Evaluation" form and send it to the Graduate Studies Coordinator or to the Graduate Program administrative assistant.

### **IID12. ELIGIBILITY FOR STIPEND RAISE**

Students who are in good academic standing are eligible for a stipend raise once they have successfully passed BIOL 8000, BIOL 8004, comprehensive exam, BIOL 8102 and at least 50% of the elective class credits. They must also have passed the required credits of BIOL 8200 and at least 9 credits of BIOL 8092. Students should direct their request for stipend increase to the Graduate Studies Coordinator who will grant the request after having verified that the requirements have been met.

### **IID13. CANDIDACY**

To become candidates, students must request approval of candidacy by submitting a petition to the Graduate Studies Coordinator, Department Chair, and Graduate School. This is done by filling in the "Candidacy Form" through the Docusign utility which can be accessed at:

https://www.memphis.edu/gradschool/resources/candidacy\_form.php?src=m.php.

### Approval of candidacy at the departmental level is based on the following:

- A. Formation of an Advisory Committee.
- B. Satisfactory completion of BIOL 8000, BIOL 8004, all elective classes, 5 credit hours of BIOL 8200, 9 credit hours of BIOL 8092, BIOL 8103, and at least 18 credits of BIOL 9000 after the student becomes candidate.
- C. Have taken a minimum of 70% of the total required hours as 8000-level courses. In addition, no more than 15 post-baccalaureate hours of 6000 level courses may be applied to a doctoral degree
- (https://www.memphis.edu/gradschool/resources/howddc.php).
- D. Students wishing to substitute a course for a required course must have the approval of their major professor, Graduate Studies Committee and Department Chair. The students must then submit the Course Substitution Form (<a href="https://www.memphis.edu/gradschool/pdfs/forms/coursesubstitution.pdf">https://www.memphis.edu/gradschool/pdfs/forms/coursesubstitution.pdf</a>), which must accompany the candidacy form.
- D. Satisfactory completion of the written and oral Comprehensive Exam.
- E. Satisfactory completion of the Proposal Exam (BIOL 8103).
- F. A cumulative GPA of 3.0 on all coursework listed on the candidacy form as well as any other graduate work undertaken at The University of Memphis within the specified time limit. Grades of "D" or "F" are not accepted for any graduate degree credit, but these grades will be computed in the GPA. No more than seven (7) hours of "C+," "C," or "C-" will be counted toward degree requirements. Grades earned in the final semester may not be used to correct GPA deficiencies (https://www.memphis.edu/gradschool/resources/howddc.php).
- G. The student's graduate work up to this point must be acceptable in quality and quantity to the Major Advisor, Advisory Committee, Graduate Studies Coordinator and Department Chair.

Approval of candidacy at the graduate school levels is based on the following:

- A. Department and College approval.
- B. Meeting all the graduate school requirements for becoming a candidate.
- C. Having the "Thesis/Dissertation Faculty Committee Appointment Form",
- "Comprehensive Exam Results Form" and "Thesis or Dissertation Proposal Defense" on file at the Graduate School.

Students who have questions about graduate school candidacy approval should direct their inquiries to the Graduate Analyst Ms. Jennifer Beech (jgbrooks@memphis.edu).

### **IID14. REQUIREMENT FOR PUBLICATIONS**

Prior to signing for the final dissertation exam (BIOL 8600), PhD students are required to have at least one publication published, in press, or accepted in a refereed peer-reviewed journal approved by their Advisory Committee. The publication must be based on work conducted during the doctoral program. In addition, students are strongly encouraged to publish other components of their research in appropriate journals and to present papers and posters at scientific meetings during their program of study.

Students may request an exception to the publication requirement by writing a 1-2 pages petition providing the reasons for their request. This petition must be submitted to the members of the Advisory Committee and to the Graduate Studies Committee. Both committees must approve this request by a majority vote. If both or one of these committees does not approve the request, the student can appeal to the Department Chair who may then consult with the two committees. The Department Chair's decision is final.

### **IID15. WRITING THE DISSERTATION**

Prior to defending the dissertation, PhD students are responsible for notifying the Graduate Analyst Ms. Jennifer Beech (jgbrooks@memphis.edu) of any changes in name and address that has occurred since they joined the program.

A written dissertation is required for all PhD candidates. The dissertation document should be prepared and presented to the Advisory Committee in the following manner:

1. Write a draft of the dissertation and revise it according to the suggestions of the major professor. Usually several rounds of revision are required before the dissertation draft can be submitted to the members of the dissertation committee.

The dissertation draft must be formatted in accordance with Graduate School policies regarding format and font size. These policies are described in: <a href="https://www.memphis.edu/gradschool/current">https://www.memphis.edu/gradschool/current</a> students/tdguide preparation.php.

The candidate is responsible for proofreading and correcting the draft to be submitted to the members of the Dissertation Graduate Committee.

2. Obtain major professor's approval to submit the final dissertation draft to the Advisory Committee for critical review. This draft must be submitted to the members of the Dissertation Advisory Committee at least two weeks before the date of the dissertation defense.

### **IID16. DISSERTATION DEFENSE**

PhD students ready to defend their dissertation must be enrolled during the semester of the defense and must sign up for BIOL 8600 (Dissertation Defense Seminar). They also need to be enrolled in the semester in which they intend to graduate if this semester follows that of the dissertation defense. Students defending in the Summer semester must be enrolled during that semester.

To defend the dissertation, the "Application for Admission to Candidacy" form must be approved (**see section IID13**) and an "Intent to Graduate Card" must be filled in following the instructions in:

<u>https://www.memphis.edu/gradschool/current\_students/graduation\_information/graduation.php</u>
These forms should be submitted before the deadlines set by the Graduate school:

https://www.memphis.edu/gradschool/current\_students/graduation\_information/graduation\_deadlines.php. Students must have at least a 3.0 cumulative GPA in all graduate work at the time the Intent to Graduate Card is filed. Requests to graduate after Semester deadline carry a fee and are rarely entertained, but if necessary, they are submitted to the Graduate School using this form:

https://www.memphis.edu/gradschool/pdfs/forms/lategraduationrevised.pdf.

The Dissertation Defense includes a dissertation defense seminar in which students present their dissertation research and discusses its scientific significance for biological sciences. This seminar must be announced to the Department at least seven days in advance. The announcement must include: the dissertation title, the date and location of the dissertation seminar, the degrees the candidate holds and from which institutions, a written abstract of ~250 words and the composition of the advisory committee. This seminar is open to the public.

The public dissertation seminar is followed by a period in which the candidate entertains questions from the general audience (faculty, students, and guests). After this, all but the student's Advisory Committee are excused. The candidate is then questioned by the Advisory Committee on aspects on the dissertation research and on the general scientific significance of these results. At the end of this questioning period, the candidate is excused, and the Advisory Committee evaluates the candidate's performance on the defense as follows:

Full Pass: All or all but one Advisory Committee voting members voting pass.

Conditional Pass: An agreement by the Advisory Committee voting members that the student has neither failed nor satisfactorily passed the examination. Remedial conditions must be stipulated by the Advisory Committee and may include either further course work or a retaking of a portion or portions of the exam. In the former case, the courses and final grade required must be designated in writing. In the latter case, a time for re-examination (no less than 30 days) will be determined by the student and the Committee. In either case, a failure to complete the agreed upon requirements will signify that the entire examination has been failed and must be retaken as noted under

"Full Fail".

<u>Full Fail</u>: Two or more of the voting committee members voting fail. The student may retake the entire examination only once. A time for re-examination (no less than 30 days from the date of the first examination) will be determined by the student and the Committee.

Upon successful completion of all degree requirements, the Advisory Committee and College Director of Graduate Studies will recommend to the Graduate School awarding the PhD degree by the University of Memphis.

Students must bring to their dissertation defense the "Thesis/Dissertation Final Defense Results Form" form which is available at:

https://www.memphis.edu/gradschool/pdfs/forms/tddefense2.pdf. At the completion of the dissertation defense exam, each member of the advisory committee must sign the form and fill in the Pass/Fail grade. Students must then make three copies of the form, one for themselves, one for the major professor and one for the department. Finally, students must promptly bring the form to the College of Arts and Sciences for signature by the College Director of Graduate studies. The College then forwards the form to the Graduate School for final approval and the Graduate School archives the form.

After the dissertation exam each advisory committee member must fill in the "Milestone Evaluation" form and send it to the Graduate Studies Coordinator or to the Graduate Program administrative assistant.

Students with a Full or Conditional Pass must revise their dissertation draft according to the suggestions made by each Advisory Committee member. This will entail submission of rewritten drafts to the committee members. Once the students obtain approval of all the members of the Dissertation Advisory Committee on a final dissertation document, they must submit to the Graduate School the following forms and documents:

- 4) "Final Committee Approval Form for Electronic Submission", which can be found on: https://www.memphis.edu/gradschool/pdfs/etd\_approval\_form.pdf
- 5) "Thesis/Dissertation Checklist" which can be found on: <a href="https://www.memphis.edu/gradschool/pdfs/thesis\_dissertation\_checklist.p">https://www.memphis.edu/gradschool/pdfs/thesis\_dissertation\_checklist.p</a> df.
- 6) Electronically submit the final dissertation document using the ETD system or to ProQuest system as described on:

  <a href="https://www.memphis.edu/gradschool/current\_students/tdguide.php">https://www.memphis.edu/gradschool/current\_students/tdguide.php</a>.

  This process is also described under heading 8 in

  <a href="https://www.memphis.edu/gradschool/current\_students/tdguide\_preparation.php#binding">https://www.memphis.edu/gradschool/current\_students/tdguide\_preparation.php#binding</a>

Students wishing to have bound copies of their final dissertation document may contact: J & K Bindery, 4602 Quince Road, Memphis, TN 38117, Phone: (901) 685-0446. Upon successful completion of all degree requirements, the Advisory Committee and College Director of Graduate Studies will recommend to the Graduate School awarding

the PhD degree by the University of Memphis.

### IID17. Grading BIOL 9000 and BIOL 8600

BIOL 9000 will receive "IP" (In Progress) grades for each semester it is in progress. In the final semester the course is taken an "IP" will be on the course until BIOL 8600 is passed or failed. At that time, please submit a grade change form noting the last BIOL 9000 course taken needs to be "SA" or "U" reflective of the given student's achievement in BIOL 9000. The grade change form is located on:

https://www.memphis.edu/registrar/pdf-docs/forms/gc\_form.pdf

BIOL 8600 will receive "IP" (In Progress) grades for each semester it is in progress. If the student passes in the initial semester enrolled, the student will receive an "S". If the student needs to defend again in a future semester (or needs more time to complete their defense), the student will need to be given an "IP" for the initial semester(s) and an "S" (if completed satisfactorily) in the last semester the course is taken (i.e. when the dissertation is defended).

### IID18. Graduation

Students who are graduating will receive an email from the Graduate School explaining the graduation ceremony requirements about one month prior to graduation.

At the graduation ceremony, PhD students will be hooded by their major professor. Major professors who can not be present at the graduation ceremony must arrange for someone to replace them and inform the Department Chair of the arrangement.

Information on ordering the cap and gown can be found on:

https://www.memphis.edu/commencement/apply/cap-and-gown-order.php.

### IID19. Timeline for The PhD In Biological Sciences

A minimum of 72 credit hours beyond the baccalaureate degree is required to obtain the PhD degree.

<u>Semester</u>	Program requirements	# CR Hours	Student needs to:	CR left to take
Fall Semester of year 1	BIOL 8000 (Orientation to Graduate Studies).	2	Sign up for BIOL 8000 in Fall semester of year 1.	70
Fall semester of year 1	BIOL 8004 (College Biology Teaching).	1	Sign up for BIOL 8004 in Spring semester of year 1).	69
Semester 2	Form an advisory committee comprising your major Professor and at least 4 other voting members.	0	Discuss committee composition with major Professor and contact potential committee members to obtain their consent. Fill in and submit Committee Appointment form.	69

Once every academic year	Meet with advisory committee to discuss progresses.	0	Schedules meeting after consulting with the major Professor.	69
End of each Spring semester	Fill in the graduate student progress form and send it to the Graduate Studies Coordinator. Meet with the Coordinator if needed	0	Fill in form and schedule meeting with Graduate Studies Coordinator if needed.	69
Semesters 1-5	BIOL 8200 (Seminar in Biology). Must take 5 CR of BIOL 8200. BIOL 8200 CR taken beyond those 5 CR will not count toward the total 72 hours. In semesters when students don't have to sign up for BIOL 8200, they should still present and attend seminars as this is helps to monitor their progress and keep up with departmental research.	1 CR per sem.	Sign up for 1 CR BIOL 8200 each semester for at least 5 semesters.	64
Semesters 1-6.	Take 33 CR of 8000 elective courses*. CR taken beyond those 33 CR will not count toward the total 72 hours.	Each course counts for a different # of CR.	Consult with your major Professor to decide what courses to take. Course load may be apportioned in different manners, but as general guidance students should sign up for 5-6 hours per semester for 6 sem. Sign up for the courses as decided.	31
Semesters 1- 5 or as decided in consultation	BIOL 8092 Research (pre-proposal). Must take 9 CR of BIOL 8092.	Consult with major Professor to decide how	Sign up for BIOL 8092 as discussed with your major Professor. BIOL 8092 load may be	22

with major Professor.	BIOL 8092 CR taken beyond those 9 CR will not count toward the total 72 hours.	many CR of BIOL 8092 to take each semester before candidacy.	apportioned in different manners, but as general guidance students should sign up for 1-2 CR for 5 semesters.		
Semester 5 or 6	Comprehensive exam	0	Consult with committee members about the topic of the exam. After the exam: fill in and submit Comprehensive Exam form. Also, each committee member should fill in Milestone forms and send to the graduate coordinator or graduate program administrative assistant.	22	
Semester 5 or 6	BIOL 8103 (Thesis proposal)	3	Sign up for BIOL 8103. Consult with major Professor as needed about the exam format and to set up an exam date. After the exam: fill in and submit the Thesis or Dissertation Proposal Defense form. Each of the Committee members should fill in the Milestone form and sent it to the Graduate Studies Coordinator.	19	
After passing BIOL 8000, 8004, 9 CR of BIOL 8092, BIOL 8103 and the comprehensive exam, students in good academic standing can request a stipend raise. Students who have completed these requirements should not sign up for BIOL 8092 (pre-proposal research) but for BIOL 9000 (Dissertation research).					
Semesters 5- 10 or as decided after consultation with major Professor.	BIOL 9000 Thesis research. A minimum of 19 CR must be taken to meet program requirement. Hours taken beyond those	Consult with major Professor to decide how many CR of BIOL 9000 to take each	Sign up for BIOL 9000 as discussed with your major Professor. Students must enroll for BIOL 9000 CR each academic semester until the thesis is	1	

	19 CR will not count toward the total 72 hours.	semester after candidacy.	completed, regardless of how many hours the program will accept.	
Semester of Graduation (ideally semester 10)	BIOL 8600 (Dissertation Defense Seminar). Fill in the Intent to Graduate Card with the graduate school. Read all instructions from the graduate school about graduation process and requirements**.	1 CR	Consult in advance with primary Professor and committee members to set up a tentative date of graduation. Sign up for BIOL 8600 on the tentative semester of graduation. Submit the Dissertation Candidacy form. File the Intend to Graduate Card with the Graduate School. Each of the Committee members should fill in the Milestone form and sent it to the Graduate Studies Coordinator or to the graduate program administrative assistant.	0

<sup>\* 70% (50</sup> CR) of courses must be taken at the 8000 level and a minimum of 50% (36) CR must be in the major.

https://www.memphis.edu/gradschool/current\_students/graduation\_information/graduation.php

Make sure to scroll all the way down to this webpage and click on: "How to Apply to Graduate".

### **IIE. SWITCHING FROM PhD TO MASTER PROGRAM**

Switching from PhD to MS or from thesis MS to non-thesis MS rarely results in early graduation.

PhD students failing to complete the PhD requirements may be granted a thesis or a non-thesis Master's degree upon successful completion of the requirements for that degree (see **sections IIB and IIC**). The switch from PhD to MS (thesis or non-thesis) must be approved by the student's Advisory Committee and by the Graduate Studies Committee. Even if the requirements are met, this does not guarantee that students will be allowed to change programs.

Changing from Thesis MS to non-Thesis MS is strongly discouraged. This will only be

<sup>\*\*</sup> Instruction from the graduate school are found on:

allowed after students have met their initial obligation (e.g., collection of data, completion of reports, or other) to the major professor and the Department of Biological Sciences, as well as to any funding agency that might be involved in the student's program. Such changes require a petition from students to the Graduate Studies Committee. Following a review of the request and consultation with the major professor, the Graduate Studies Committee will act on the petition. Student may be called for a personal interview with the Graduate Studies Committee. If a student moves from the thesis MS to the non-thesis MS and has taken thesis research hours (BIOL 7996), a retroactive drop (or withdrawal) must be processed for the last term of enrollment in thesis credit to reflect the change of program on the student's transcript.

When the switch is approved, students must complete the "Change of Status" form: https://www.memphis.edu/gradschool/pdfs/forms/changeofstatus.pdf.

For students who are Graduate Teaching Assistant, the Graduate Studies Committee will make a recommendation to the chair as to whether to maintain TA status after the switch. If the Chair agrees to maintain TA status, the stipend will be adjusted to that of MS TAs. The Department of Biological Sciences does not normally provide financial support for non-Thesis students. Therefore, students with teaching or research assistantships will likely lose this support if they change from the Thesis to non-Thesis MS program.

### **IIF. SWITCHING FROM MASTER TO PhD PROGRAM**

MS students must complete their MS degree before applying to a PhD degree. When applying to a PhD degree in our program, these students must follow the procedure outlined in IB1.

If the student was a Graduate Teaching Assistant (GTA) during the MS studies, the GTA will not transfer automatically if the student is accepted in the PhD program. This decision will be made by Graduate Studies Committee as it evaluates the pool of applicants reviewed during the application cycle.

### **IIG. ACQUIRING A nt-MS WHILE IN THE PhD PROGRAM**

It is possible for PhD students to acquire a nt-MS while working on their PhD. Students who choose this option will graduate with a nt-MS **and** a PhD.

Students wishing to take advantage of that option must follow these steps:

- 1) Obtain the approval of their advisor.
- 2) Fill out the Change of Status form:

https://www.memphis.edu/gradschool/pdfs/forms/changeofstatus.pdf and turn it in to the college. The college will pass it to the grad school.

- 3) Once that form is processed, the MS status is added to the student account in myMemphis (this could take a few weeks).
- 4) Apply to graduate for MS through myMemphis.
- 5) Fill out the MS Candidacy form available online and turn it in to the college.

## PART III. PROGRAM POLICIES

### **IIIA. INTRODUCTION**

<u>All</u> graduate students in the Biological Sciences program must follow the policies outlined <u>in the most current version</u> of the graduate handbook.

Graduate students should also abide by University and College level student codes of conduct. A description of graduate students rights and responsibilities can be found on: https://www.memphis.edu/gsa/about/rights and responsibilities.php.

### **IIIB. ACADEMIC PROBATION AND GRADE APPEAL**

### **IIIB1. Academic Probation**

A graduate student whose cumulative grade point average drops below 3.00 will be placed on academic probation. A second consecutive semester on probation can result in dismissal from the graduate program.

The graduate student can petition the Graduate Studies Committee for continuation beyond two consecutive semesters on probation by providing a detailed plan for remediation and any relevant documentation. The graduate student petition must be supported by a letter from the primary advisor.

Upon reviewing this information, the Graduate Studies Committee makes a recommendation to the Department Chair. Petitions approved by the Graduate Studies Committee and Department Chair must then be approved by the Associate Dean for Graduate Studies in the College of Arts and Sciences and finally by the Dean of the Graduate School.

A graduate student may be placed on academic probation if the advisory committee determines that this student research activity has been below minimal expectations for at least one year. The terms of the academic probation will be worked out in a written remedial contract between the student, student's advisor and advisory committee. The remedial contract will include specific research goals to be met by the student within a set period of time. The mentor will then inform the Graduate Studies Coordinator of the recommendation for academic probation. Within two weeks, the student can petition the Graduate Coordinator for a hearing. During the hearing the student and the mentor will individually present their point of view to a committee comprising the Graduate Studies Committee (GSC) and Department Chair. At the end of the hearing, the GSC will vote on whether to uphold the academic probation and the terms of the remedial contract. This vote will be advisory to the Department Chair who will make the final decision. Within two weeks of this decision, the Graduate Studies Coordinator will write a report including a description of the student behavior leading to the situation, the remedial contract, a summary of the hearing, vote of GSC and final decision of the Department Chair.

At the end of the time period specified in the remedial contract, the progress of the

student toward fulfilling the terms of the contract will be evaluated during a meeting between the student, the mentor and the student advisory committee. If the remedial contract has been successfully fulfilled, the academic probation will be lifted. If the remedial contract has not been successfully fulfilled, then a termination decision will be made. The advisor will formally inform the student, GSC and Department Chair of the decision of the student advisory committee. In that case, the student will have two weeks to appeal the termination decision by petitioning the GSC and the Department Chair.

If the student appeals the decision, the coordinator will call for a hearing in which the student and mentor will each be heard individually by a committee comprising the GSC and the Department Chair. At the end of this hearing, the GSC will vote on whether to uphold the termination decision. The vote will be advisory to the Department Chair who will make the final decision. Within two weeks of the hearing, the Graduate Coordinator will write a report on the proceedings of the meeting and rationale for termination. The student can appeal that decision to the College of Arts and Sciences Graduate Council, and, if needed, to the University Graduate Council. This appeal procedure is described in <a href="https://catalog.memphis.edu/content.php?catoid=9&navoid=222">https://catalog.memphis.edu/content.php?catoid=9&navoid=222</a> (scroll down to "Retention Appeal"); note that it includes deadlines to be met.

The termination procedure is described in:

https://catalog.memphis.edu/content.php?catoid=9&navoid=222 (scroll down to "Termination Procedures").

### IIIB2. Grade Appeal

This procedure is for a graduate student to appeal a course grade that the student believes was based on prejudice, discrimination, arbitrary or capricious action, or some other reason not related to academic performance. In all cases the student submitting the complaint will have the burden of proof with respect to the allegations in the complaint and in the request for a hearing.

Details about the grade appeal procedure can be found here:

https://catalog.memphis.edu/content.php?catoid=9&navoid=222 (scroll down to "Appeals Procedures").

### **IIIC. TERMINATION AND WITHDRAWAL**

### **IIIC1. Causes for Termination**

Graduate Students may be terminated if: (1) they are placed for a second consecutive semester on academic probation, (2) over a period of at least a year they fail to progress in their research as determined by their advisory committee (see **section IIIB1**), (3) they fail twice the comprehensive or prospectus examination, (4) they fail the thesis or dissertation exam, or (5) they fail to comply with Department or University or Department regulatory policies.

### **IIIC2. Termination Notification and Appeal**

After approval of the recommendation to terminate by the Graduate Studies Coordinator

and Department Chair, the student is informed by their Academic Advisor.

The Advisor, Graduate coordinator, and/or Department Chair then sign and submit the termination form (<a href="https://www.memphis.edu/gradschool/pdfs/forms/termination.pdf">https://www.memphis.edu/gradschool/pdfs/forms/termination.pdf</a>) to the Associate Dean for Graduate Studies of the College of Arts and Sciences.

The termination decision may be appealed if the student presents a request for hearing to the Associate Dean for Graduate Studies of the College of Arts and Sciences.

The detailed appeal procedure can be reviewed here:

https://catalog.memphis.edu/content.php?catoid=9&navoid=222#appeals-procedures.

If approved, the Associate Dean of the College of Arts and Sciences signs and submits the termination form to the Graduate School.

The Dean of the Graduate School reviews the recommended request for termination. If the request is approved, the Dean of the Graduate School sends a letter of termination to the student and copies all parties.

### IIIC3. Withdrawal from the Graduate Program

A graduate student may withdraw from the Department of Biological Sciences graduate program after the specified drop date for the semester of withdrawal only when circumstances beyond the student's control make it impossible to complete the semester. These cases must be verified by the departmental Graduate Studies Coordinator. Late drops or withdrawals will <u>not</u> be approved when a student simply wishes to avoid receiving an unsatisfactory grade.

A detailed explanation of the procedure as well as the petition form are located here: https://www.memphis.edu/gradschool/current\_students/lateproc.php.

The student's petition, once signed by the Associate Dean for Graduate Studies (College of Arts and Sciences), must be sent to the Graduate School for final approval. The Graduate School will deliver completed forms to the Registrar's Office.

# IIID. ROLES OF THE GRADUATE FACULTY, GRADUATE STUDIES COMMITTEE, GRADUATE STUDIES COORDINATOR, AND DEPARTMENTAL CHAIR TERMINATION AND WITHDRAWAL

### IIID1. The Graduate Faculty

Full Graduate Faculty status allows faculty to: (1) serve as primary graduate student mentors (major professor) and/or chair graduate student thesis or dissertation committees, (2) to serve as members of thesis or dissertation committees, (3) to serve as lecturer or director of graduate courses, and (4) to vote on motions to amend the graduate curriculum of the Department of Biological Sciences.

Full Graduate Faculty members make amendments to the graduate curriculum/program by a majority vote.

Full Graduate Faculty status is granted for a period of six calendar years. After this term the individual re-applies to renew this status.

Graduate Faculty Status other than Full include: Associate, Adjunct, Adjunct Research co-mentor and Affiliate. Eligibility criteria and procedures for initial appointment and renewal are described in:

https://www.memphis.edu/gradschool/resources/gradfac\_guidelines.php.

Applications for initial appointment and renewal are done electronically as described in: <a href="https://www.memphis.edu/gradschool/resources/gfs">https://www.memphis.edu/gradschool/resources/gfs</a> app instructions.php.

The list of the graduate Faculty of the Department of Biological Sciences can be found here:

https://www.memphis.edu/gradschool/resources/graduate\_faculty/cas/biol.php.

### **IIID2. The Graduate Studies Committee**

The members graduate studies committee (GSC) are appointed each year by the Department Chair. The GSC comprises 5-6 full graduate faculty members of the Department of Biological Sciences, including the Graduate Studies Coordinator, who also chairs this committee. The Department Chair and the Chair of Strategic committee are ad-hoc members of this committee.

The charge of the GSC are:

- To evaluate applications to the Department graduate program and to anonymously vote on acceptance decisions (majority vote).
- To evaluate applications for Graduate Teaching Assistantships and to anonymously vote on award decision (majority vote).
- To review new graduate courses (6000-9000) and to vote on acceptance decision (majority vote).
- To discuss issues related to graduate students in probation or in other difficulty and to chart a course of action or make decisions to resolve these situations.
- To establish a strategic plan to improve the department graduate program curriculum, education and enrollment components.

To carry out these charges, the GSC meets at least four times a year. Decisions are made by a majority vote.

The activities of the Graduate Studies Committee may be facilitated by the Graduate Studies Administrative Assistant as determined in consultation with the department Chair.

# IIID3. The Graduate Studies Coordinator and Graduate Studies Administrative Assistant

The Graduate Studies Coordinator is appointed by the Department Chair. The charges of the coordinator are:

- To chair the Graduate Studies Committee.
- To coordinate and participate to all the tasks and activities of the Graduate Studies Committee.
- To manage the graduate budget in coordination with the department chair and department financial manager.

- To organize meetings of the Department Graduate Faculty to discuss the graduate program and to vote on motions to amend the graduate curriculum.
- To report about the graduate program to the faculty during departmental meetings.
- To attend meetings of the College of Arts and Sciences Graduate Council.
- To serve on College Graduate Committee(s) as assigned by the College Associate Dean for Graduate Studies.
- To answer queries from applicants, current graduate students and faculty members about the department graduate program.
- To inform applicants to the department graduate program about acceptance decisions.
- To perform the annual review of graduate students.
- To sign graduate students' "Thesis Committee Appointment Form", "Thesis or Dissertation Proposal" form, and "Final Committee Approval form".
- To verify that students submitting the candidacy form have completed all the necessary requirements.
- To present an orientation/information seminar for graduate students at the beginning of the Fall and Spring semesters.
- To organize the Graduate Students' Seminar (BIOL 7200/8200).
- To attend or organize attendance/staffing at graduate fairs.
- To manage the process of new or revised graduate courses and graduate curricular changes with the Curriculog system ( <a href="https://memphis.curriculog.com/">https://memphis.curriculog.com/</a>).
- Together with the Chair and lab coordinators, to prepare the TA teaching assignment schedule for each academic semester.
- To collect data and to compile statistics about the department graduate program.
- To compile data for the annual NSF graduate education survey.
- To provide the College of Arts and Science an annual headcount of the Graduate Students in the Department.
- To prepare the annual SACS evaluation.
- To maintain the Departmental graduate program electronic folder (Biograd).
- To supervise the activities of the Graduate Studies Administrative Assistant.

### **IIID4. The Graduate Studies Administrative Assistant**

The Graduate Studies Administrative Assistant is typically hired by a search committee that includes the department Chair and the Graduate Studies Coordinator. The charges of the Graduate Studies Administrative Assistant are:

• To facilitate the activities of the Graduate Studies Coordinator and Committee. Specific activities will be assigned by the Graduate Studies Coordinator and must be approved by the Department Chair.

- To organize and update graduate student files.
- To prepare eContracts for TA's/GA's.
- To enter permits for graduate courses (6000-9000) if requested by the Department Chair.

### **IIID5. The Department Chair**

Regarding the graduate program, the role of the Department Chair is:

- To appoint the members of the Graduate Studies Committee.
- To serve as ad-hoc member of the Graduate Studies Committee, especially to establish a strategic plan to improve the department graduate program curriculum, education and enrollment components.
- To supervise the management of the budget of the graduate program in consultation with the Graduate Studies Coordinator.
- To supervise the preparation of GTA eContracts by the department financial manager.
- To assign the duties of the administrative assistant for the graduate program in consultation with the Graduate Studies Coordinator.
- To sign graduate students' "Thesis Committee Appointment Form", "Thesis or Dissertation Proposal" form, "Candidacy" and "Final Committee Approval form."
- To review and approve requests for graduate faculty status.
- To review and approve Curriculog requests for new or revised graduate courses and graduate curricular changes. This is done after the approval of the Graduate Faculty and/or Graduate Studies Committee.
- To arbitrate conflicts that may arise during graduate students' tenure as discussed in different parts of this Handbook.

### **IIIE. DUTIES OF GRADUATE TEACHING ASSISTANTS**

### **IIIE1. Award of Graduate Teaching Assistantship (GTA)**

GTAs and tuition waivers are awarded after a vote of the Graduate Studies Committee. The vote is based upon available department funds and on the qualifications of the candidates. Students without a GTA are strongly encouraged to apply for fellowships. Students awarded a fellowship must comply with the Fellowship's specific requirements.

Applicants for whom English is not their native language must submit proof that they have taken an English Language Proficiency test. The different tests accepted and the minimal scores for acceptance in the program and for GTA consideration can be found on: <a href="https://www.memphis.edu/iei/speaktest/index.php">https://www.memphis.edu/iei/speaktest/index.php</a>. This website also has information on the SPEAK test. This test can be taken on-campus by international students who have been accepted into the program but whose English Proficiency test does not qualify them for a GTA.

### IIIE2. Stipend and tuition waiver

The GTA stipends are:

- PhD before passing the comprehensive and the proposal exams: \$15,750 (11 months support).
- PhD after passing the comprehensive and the proposal exams: \$17,750 (11 months support).
- MS before passing the comprehensive and the proposal exams: \$11,750 (10 months support).
- MS after passing the comprehensive and the proposal exams: \$13,750 (10 months support).

The stipend covers the Spring and Fall semesters (9-month support for MS students, 11-month support for PhD students). Students seeking income during the summer semester should discuss available opportunities with their primary advisor or contact the Department Chair to inquire about GTA opportunities during the summer semester. Typically, Graduate Teaching Assistants are also awarded a tuition waiver.

### **IIIE3. GTA renewals**

GTA renewals are automatic for teaching assistants whose teaching performance is satisfactory as judged by the lab. coordinator, who are in good academic standing, and whose time in the program does not exceed 10 and 6 semesters for PhD and MS students, respectively. Teaching assistants whose time in the program exceeds these limits may petition the Graduate Studies Committee for a GTA extension on a semester-by semester basis. In addition, the primary advisor of these students should indicate to the Graduate Studies Committee why they support this GTA extension petition.

#### **IIIE4. GTA Contractual Commitment**

The contractual commitment for a GTA is 20 hours of work per week. This typically consists of up to 8 hours of class or lab time and 12 hours for class preparation, including grading and proctoring. Depending on the department needs, teaching assignments may vary from year to year.

### **IIIE5. Teaching assignments**

The Chair and/or the Graduate Studies Coordinator and/or the lab coordinators are responsible for teaching assignments. GTAs can petition the Chair or the Graduate Study Coordinator to be assigned specific classes. Whether or not these requests will be granted depends on teaching needs and student qualifications.

### **IIIE6. Certification prerequisites**

All GTAs are required to complete FERPA training. Only one initial training is required. Instructions on how to complete the training can be found at:

https://www.memphis.edu/registrar/faculty/ferpa/tutorial.php.

After completion of the training, GTAs should email the certificate of completion to the Graduate Studies Coordinator.

Some laboratory coordinators may also require GTAs to take bloodborne pathogens and/or biosafety training.

### IIIE7. Teaching duties

At the start of each semester, the laboratory coordinators will call a meeting to discuss the tasks at hand with the GTAs assigned to their course/laboratory.

Depending on the course/laboratory:

- GTAs must follow the specific class guidelines prepared by the lab coordinator.
- GTAs are expected to attend the weekly laboratory meeting if requested by the Laboratory Coordinator.
- Grades are expected to be entered into the grade book within one week of the assignment.
- GTA's are expected to respond to student emails within 24-36 hours on business days, M-F, 8-4:30 pm. Responses may be given more quickly and at any hour, if the TA chooses.
- GTA's are expected to inform the Laboratory Coordinator of potential problems as they arise.

# IIIE8. Rules for Additional Employment for Students with a Full GTA or Research Assistantship

Graduate students with a full-teaching assistantship are not allowed to have additional employment.

Students seeking an exception to this rule may petition their major professor, the Department Chair, and the Graduate Studies Coordinator, in writing, to explain why additional employment is requested. If the major professor, department Chair, and Graduate Studies Coordinator agree that this additional employment will not jeopardize the student's teaching and/or research performance, an exception may be granted in writing by the Department Chair, or by the Graduate Studies Coordinator, if the Chair is the student's Major Professor. This exception is reassessed on a semester by semester basis in conjunction with the major professor and, where needed the graduate studies committee.

Failure to follow this rule will result in an automatic probation semester. If the situation is not rectified after that semester, the major Professor can petition the Department Chair for termination of the student's GTA. The Department Chair will make a decision upon consultation with the Graduate Studies Committee.

Research Assistants funded by a grant or a fellowship from a federal agency must abide by the rules of the funding agency with respect to stipend supplementation or additional compensation.

### IIIE9. Situations that may result in GTA termination

GTAs must maintain a 3.00 GPA. GTAs with a GPA lower than 3.00 can present a remediation plan to the Chair and the Graduate Studies Committee to petition for the renewal of their GTA.

A GPA lower than 3.00 for two consecutive semesters will result in GTA termination according to University regulation

(https://www.memphis.edu/gradschool/current\_students/ga.php).

Students with a full-time teaching assistantship must be present in classes or labs at times mandated by their teaching schedule. If they cannot attend their teaching duties due to unforeseen circumstances, they must inform the course coordinator in advance and must have their approval. If informing the course coordinator in advance is not possible, GTAs must inform the course coordinator as soon as possible of the reason for their absence and must present supporting documentation. GTAs must maintain appropriate behavior. Failure to follow these rules may result in termination of the GTA upon review of the case by the Chair and the Graduate Studies Committee.

### IIIE10. Instructor of record status

To be instructor of record, a GTA must: (1) hold an MS degree in the teaching discipline or have completed at least 18 graduate semester hours in the teaching discipline and (2) submit the Verification of Academic Credentials form (<a href="https://www.memphis.edu/gradschool/pdfs/forms/verification\_academic\_credentials.pdf">https://www.memphis.edu/gradschool/pdfs/forms/verification\_academic\_credentials.pdf</a>)

### IIIF. PROFESSIONAL AND ETHICAL POLICIES

### IIIF1. Work Schedule, Vacations and Leave of Absence

The work schedule of graduate students should follow the primary advisor's lab policy. Generally, this includes Monday to Friday for 7.5 hours each day at times when the students can interact with lab members and their primary advisor. Departure from this general schedule may be warranted by the student's specific research and data collection needs as discussed and approved by the student's primary advisor.

Vacation time is determined by the primary advisor's lab policies. When planning vacations, students should notify their primary advisor at least one month in advance, and travel dates should be discussed and agreed upon.

Graduate students having a teaching assistantship should not take vacation during their teaching duties unless they have been granted permission by the course instructor. Failure to follow this rule can result in termination of the teaching assistantship.

In rare circumstances a graduate student may petition the Graduate Studies Committee for a leave of absence when they cannot be continuously enrolled. This must be due to matters beyond student control, such as military duty, medical needs, or bereavement. Leaves of absence should be requested using this form:

https://www.memphis.edu/gradschool/pdfs/forms/leaveofabsence.pdf.

### **IIIF2. Academic Misconduct**

Graduate students are expected to observe the University of Memphis Code of Student Conduct, which defines academic misconduct as all acts of cheating, plagiarism, forgery, and falsification.

Graduate students are expected to be familiar with the University's policies on cheating, plagiarism, forgery and falsification outlined in the Academic Regulations webpage of the Graduate School:

https://catalog.memphis.edu/content.php?catoid=9&navoid=222#academic-misconduct

According to this webpage: "Academic misconduct also includes furnishing false information to a University official, faculty member, or office; or the forgery, alteration, or misuse of any University document, record, or instrument of identification. The Academic Discipline Committee, a standing University committee appointed by the President, addresses allegations of academic misconduct."

### IIIF3. Compliance with Regulatory Policies

Graduate students must comply with regulatory policies related to: (1) Human Subjects, (2) Vertebrates Animals and (3) Biohazard. The details of these regulatory policies can be consulted here:

The Institutional Review Board (IRB) website:

https://www.memphis.edu/research/researchers/compliance/irb/index.php

The Animal Care and Use Committee (IACUC) website:

https://www.memphis.edu/research/researchers/compliance/animalcareanduse.php

The Institutional Biosafety Committee website:

https://www.memphis.edu/ehs/

Failure to comply with these policies could delay student graduation and/or have severe consequences outlined in the above webpages.

### IIIF4. Graduate Students Privacy Rights

The Department of Biological Sciences complies fully with the Family Educational Rights and Privacy Act (FERPA) of 1974. This act is designed to protect the privacy of educational records, to establish the right of students to inspect and review their educational records, and to provide guidelines for the correction of inaccurate or misleading data through informal and formal hearings.

Complete information on FERPA policies and procedures are here:

https://catalog.memphis.edu/content.php?catoid=9&navoid=222#privacy-rights-of-parents-and-students.

# **PART IV. ANNEX**

# INTERNET LINKS RELEVANT TO THE GRADUATE STUDIES PROGRAM

Department of Biological Sciences Website

https://www.memphis.edu/biology/

Department of Biological Sciences Graduate Faculty

https://www.memphis.edu/gradschool/resources/graduate\_faculty/cas/biol.php

Department of Biological Sciences Faculty Research Interests

https://www.memphis.edu/biology/researchareas/index.php

Department of Biological Sciences Graduate Program

https://www.memphis.edu/biology/graduate/

Department of Biological Sciences Graduate Students

https://www.memphis.edu/biology/graduate-students/index.php

Department of Biological Sciences Blog

https://blogs.memphis.edu/biology/

Department of Biological Sciences Centers

https://www.memphis.edu/biology/centers/index.php

College of Arts and Sciences Council for Graduate Studies

https://www.memphis.edu/cas/council-grad/index.php

https://www.memphis.edu/cas/faculty-

resources/research grants funding/council for grad studies.php

University of Memphis Graduate School Website

https://www.memphis.edu/gradschool/

University of Memphis Graduate Student Association

https://www.memphis.edu/gsa/

University of Memphis graduate studies application website

https://www.memphis.edu/graduateadmissions/future/apply\_grad.php

University of Memphis graduate studies forms

https://www.memphis.edu/gradschool/resources/forms index.php

Cap and Gown Order: Form:

https://www.memphis.edu/commencement/apply/cap-and-gown-order.php