

The University of Texas at Dallas

GRADUATE PROGRAMS IN MOLECULAR AND CELL BIOLOGY

Graduate Student Guide
Developed by the Graduate Education Committee

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Department of Biological Sciences

Graduate Student Guide

GUIDELINES AND PROCEDURES FOR GRADUATE STUDENTS IN MOLECULAR AND CELL BIOLOGY PROGRAMS

A HANDBOOK AND SUPPLEMENT TO THE GRADUATE CATALOG

The following pages provide general information available in the Office of Graduate Education¹ and are intended to inform our graduate students about policies, procedures, and recommendations that are specific to the Department of Biological Sciences. For any questions about special cases not described in the handbook, please contact the Graduate Advisor or the Department Head. These policies apply to all graduate students in the M.S. and Ph.D. programs in Molecular and Cell Biology.

¹ <https://graduate.utdallas.edu/>

Welcome to the Department of Biological Sciences and the University of Texas at Dallas. The graduate program in the Department of Biological Sciences is deeply rooted as one of the longest established departments at the University of Texas at Dallas. The founders of the Program were leading contributors to the birth of molecular biology and pioneers of cloning technologies of the 1960s. Alumni of our Program have gone on to lead renowned academic research programs and large industrial research enterprises, as well as win a Nobel Prize in Chemistry. The faculty of the Department are highly accomplished in their fields.

We, the faculty, are deeply committed to the education and training of our students. We strive to provide individualized, tailored guidance to each of you to nurture independence in thought, hone strong analytical skills, create adept ability to design critical approaches and research strategies, and engage and encourage your tenacity and determination to obtain new knowledge about biological systems. From this spirit of individualized education and training, we place strong and equal responsibility on you to do your best part to advance your own research and training, for timely completion of your graduate education, and transition to professional careers. We encourage you to engage with your Graduate Research Supervisor(s) actively via regular weekly, if not monthly, meetings and to meet with your Supervising Committee Members and the Graduate Advisor annually. Completion of an advanced graduate degree, especially Ph.D., in biological and biomedical sciences is challenging and requires a strong commitment and hard work. You need to take full ownership of your training and completion of your degree program. We are here to support you on your academic journey to a career in research, teaching, healthcare, or any profession requiring unique skill sets obtained from our program.

1 ADMISSION

The Graduate Education Committee (GEC) reviews all applications for entry into the graduate programs in Molecular and Cell Biology. The primary criterion for admission is the judgment of GEC members that the applicant has a reasonable chance of completing the requirements for an M.S. or Ph.D. degree. The committee evaluates course background, research experience (for Ph.D. applicants), and letters of reference, especially one from a research mentor who comments on the applicant's research potential (for Ph.D. applicants).

An M.S. student, either current or recently graduated, who wants to become a Ph.D. student must reapply for admission. This application process is identical to the regular Ph.D. application but will include grades at UTD and a letter of reference from one or more UTD faculty members, including a letter of reference from a faculty member who has supervised the applicant's research.

The Ph.D. program in Molecular and Cell Biology defines a Ph.D.-track student as one who intends to take the Qualifying Examination and perform dissertation research (see p. 5). The University initially classifies all Ph.D.-track students as Ph.M. students until they have earned 30 semester credit hours (SCH), at which time they are re-classified as Ph.D. students.

When students are first admitted by the Graduate Education Committee, they should be classified as either:

1. Ph.D.-track students
- or, 2. M.S. students for a laboratory research (Thesis) degree,
- or, 3. M.S. students for a non-thesis degree

This decision is not irrevocable, and a student can change their designation by contacting the graduate student Academic Support Coordinator and consulting with the Graduate Advisor.

M.S. students are advised by the Graduate Advisor. In their first year, Ph.D. students are advised by the Graduate Advisor and subsequently by their research supervisor.

For admission of Non-degree Students, see Catalog.

As a requirement, international students must be able to communicate readily in both verbal and written English. All international students awarded a teaching assistantship (TA) are required by the University to pass an English proficiency test, to be administered by the University prior to the assumption of teaching duties. Students who otherwise demonstrate deficiencies in English may be required to take appropriate remedial English courses. In addition, students should strive to improve their proficiency at the verbal level by as much exposure to the English language as possible.

2 TYPICAL CURRICULUM FOR Ph.D.-TRACK STUDENTS

2.1 Minimum total credit hours (graduate level)

18	credit hours earned in Core Courses
9-12	credit hours earned in General Electives (minimum of four elective courses)
60-63	additional credit hours earned in any category of biology courses

90	credit hours in total Biology courses
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2.2 Core Courses

The core courses provide basic knowledge of biology with an emphasis on molecular aspects. The following core courses are mandatory for Ph.D. students:

BIOL5410	Biochemistry
BIOL5420	Molecular Biology
BIOL5440	Cell Biology
BIOL5460	Quantitative Biology
BIOL6193	Colloquium in Molecular & Cell Biology
BIOL6V02	The Art of Scientific Presentation

The requirement to take a particular core course may be waived if the student obtains permission from the Instructor-in-charge and the Graduate Advisor. However, such permission is infrequently granted. Undergraduate courses cannot substitute for graduate core courses.

2.3 Laboratory Rotations.

Mentored research is the major focus of graduate study at UTD. To gain exposure to diverse research environments, all students admitted to the Ph.D. program are required to do two semester-long rotations in two different laboratories. These rotations will provide a basis for selection of a thesis advisor and dissertation topic. During the lab rotation, students will read the research literature and participate in the formulation, execution, and analysis of scientific work conducted in the host laboratory. Students may take more than two rotations if the first two are not satisfactory. Failure to find a lab after the end of the second year will result in dismissal from the Program. Colloquium (BIOL 6193) is a seminar-style course that introduces students to research in different labs.

The only exception to the two-rotation requirement is for UTD undergraduates or MS students who have been admitted into the Ph.D. program and working in one lab at UTD. Such students can stay in the same lab without the need for a second rotation. Students are evaluated by the Principal Investigator in whose lab they rotate, according to criteria outlined in **Appendix B**.

2.4 Other Courses

General Electives – A Ph.D. student must take a minimum of four general elective courses, for a minimum of 9 SCH. Letter grades are assigned in all General Electives. Students should consult with the graduate advisor or research supervisor in choosing the courses most appropriate for their studies. However, BIOL6V31 (Molecular Genetics), BIOL6356 (Eukaryotic Molecular and Cell Biology), BIOL6352 (General Biochemistry I), and BIOL6353 (General Biology II) are not to be taken as electives for the graduate degree. Rather, these courses are intended as remedial courses for students whose background is determined to be lacking in one or more of these critical areas of study. Students unsure as to whether an elective will count toward their graduate degree should consult with the Graduate Advisor prior to registering.

Special Electives – These are colloquium courses for small groups, in which the research of faculty and students and recent literature are analyzed and discussed. Participation in these courses is particularly important for Ph.D. students.

General Course Descriptions

Research in Molecular Biology BIOL8V01 – Supervised research in one or more laboratories where the student acquires specific skills and performs work on which the dissertation is usually based. These courses are offered throughout the year, including summer terms, and are usually taken by students who have satisfied core course requirements.

Colloquium in Molecular Biology BIOL6193 – Molecular and Cell Biology professors introduce themselves and acquaint first-year students with their interests and current research work. This provides information to assist students in the choice of a laboratory and supervisor for thesis and dissertation work.

The Art of Scientific Presentation BIOL6V02 – Students learn how to give an effective seminar by reading scientific articles on a central theme in biology and then delivering a presentation to their classmates and to the Molecular and Cell Biology faculty and students. While learning the focused theme, students acquire skill sets in critical reading of scientific literature and oral presentation.

Current Research BIOL6252 – A minimum of 4 hours of accumulated credit hours from this course is required for Ph.D. students for furthering their training in research presentation and scientific communication skills. In the Fall Semester of each academic year, the students present journal articles that were recently published outside of their area of thesis research. In the Spring Semester of each academic year, the students present their ongoing thesis research projects. The 2nd year students will present their developing research project to the Department as they prepare for Qualifying Examinations and should enroll in the BIOL6252.001 section. Students in their 3rd, 4th, or 5th year will present their ongoing and more mature thesis research to the Department and should enroll in the BIOL6252.002 section.

Department Biology Seminar BIOL6100 – A minimum of 2 hours of accumulated credit hours from this course is recommended for Ph.D. students. Sections of BIOL6100 are dedicated for student participation in the discussions of departmental research presentations by their fellow students from BIOL6252 or by invited speakers. The students cannot enroll in BIOL6252 and BIOL6100 simultaneously in the same semester.

Dissertation BIOL8V99 – Three hours are the minimum and twenty-four accumulated credit hours are the maximum permitted. Once a student registers for Dissertation, enrollment must be continuous until graduation. Consult the graduate catalog for additional details. Graduate Support Coordinator in the Department can provide further guidance.

2.5 Teaching Requirement

The Department considers teaching experience to be an integral part of the graduate program. All Ph.D. students must serve as teaching assistants for a minimum of two semesters. It is essential that students perform all TA duties to the satisfaction of the instructor-in-charge. Failure to do so can result in the termination of their stipends. TAs will typically run review sessions, and grade homework, tests, papers, and lab reports.

The instructor-in-charge is the primary teacher of any course, and the TA is not expected to give lectures, when the instructor-in-charge is unavoidably absent, and even then not for more than one or two lectures. For extended absences, the Instructor-in-charge will be replaced by another faculty member.

2.6 Evaluation of First Year Students

The Graduate Advisor and the GEC will evaluate progress at the end of the first year by the criteria listed below and determine whether a student continues to the second year. Most student performances are routine and do not need intervention. For all cases in which performance is not satisfactory, the Graduate Advisor or a member of the GEC will talk to the student and suggest

remedial action. The Department Head may participate in any step in this process. This evaluation is strictly confined to the Department unless a student's GPA is under 3.0. In this case, the Graduate Dean's Office intervenes and requires justification for the continuation of stipend support. The University requires an overall GPA of 3.0 for core courses and for all courses.

Core course performance. Ph.D. students must obtain a grade of B or better in each of the four core courses. If a student obtains a B- or worse, the student must retake the course. This requirement exceeds those of the University.

Laboratory Rotations. Each rotation research supervisor will provide a written evaluation of the student's performance and research potential during the rotation.

Performance as teaching assistants. Teaching evaluations will be provided on written forms by the instructor-in-charge. The strengths and weaknesses of the TA will be noted, and the evaluations will be sent to the student.

2.7 Supervising committee

Students accepted into laboratories of Dissertation Sponsor (aka thesis advisor, see section 5.1) for dissertation research will, in consultation with their Dissertation Sponsor, select a thesis committee (see section 5.2) consisting of three additional faculty members (by mutual agreement with those particular faculty members). The supervising committee should be formed early in the Ph.D. studies (within the first semester of the second year). The student will submit to the Graduate Support Coordinator a form listing the faculty who have agreed to be on their thesis committee. The required form is available from the Graduate Support Coordinator and once completed by the student is then circulated by the Graduate Support Coordinator for appropriate approvals.

For the students admitted to the Ph.D. Program in Molecular and Cell Biology, the research supervisor must be from the Department of Biological Sciences faculty.

Committee members outside of the Department or outside of the University are allowed and can be beneficial to the student and the University. However, thesis committees must have at least 2 faculty members from the Department of Biological Sciences.

2.8. Qualifying Examination

A Ph.D. student is required to pass a Qualifying Examination (QE). The QE consists of a succinct, well described written research proposal and an oral defense of the research proposal (described below). The purpose of the QE is to demonstrate problem-solving ability, an appropriate work ethic, and knowledge of the literature. Extensive preliminary results or feasibility of the proposed research is not required. The QE should be done well before the end of the third year in all cases to ensure that students do not exceed the allotted financial support limit (10 long semesters of Assistantships) set by the School. It is strongly recommended that QE is completed by the end of second year. In rare cases, there may be justifiable circumstances that would cause an extended delay for QE. These circumstances should be communicated by the student and Dissertation Supervisor to the supervising committee (if constituted) and the Graduate Advisor. The Graduate Education Committee will determine whether an extension for QE deadline will be granted to the requested student with inputs

from the Dissertation Sponsor and the supervising committee. If a QE extension is not granted by the Graduate Education Committee, the student will be dismissed from the program.

The QE examining committee consists of three Biology faculty who are members of the supervisory (thesis) committee (excluding the supervising professor) plus one additional Biology faculty. The outside member will be selected at random by the Graduate Advisor. If for any reason one of the designated examining committee members cannot be present, the exam will either be rescheduled or a member of the GEC will take their place. Other faculty members may also attend the exam as non-voting participants.

At the QE exam, the student's supervising professor is expected to attend as an observer, respond to questions of clarification on the research proposal at the request of members of the examining committee, and contribute to deliberations before the vote. The supervising professor is not a voting member of the committee.

The length of the written proposal for the QE should be no more than 12 double-spaced pages (excluding the references, figures and tables) in 12-point type with top, bottom and side margins of no less than 0.75 inches. The proposal should be written in clear and concise English. The format for the proposal will be similar to that used for NIH grants and should contain six parts:

1. **Specific aims.** This section should begin with a paragraph summarizing the overall objectives of the research project followed by a brief description of the specific aims of the proposal. Typically, there should be two to four specific aims that can be accomplished within the time frame of a graduate student career. A suggested length for the specific aims is one page.
2. **Background and significance.** This section should concisely explain the background literature and introduce the topic of the proposal sufficient for an understanding of the significance of the proposed work. The suggested length is two to three pages.
3. **Preliminary results.** This section should contain data generated by the student that is pertinent to the specific aims of the proposal. One to three pages of text should suffice, noting that figures and tables will be in a later section. (It might occur that a student has collected significant data on a project that is unrelated to the topic finally chosen for the QE proposal. Should the student and advisor consider it important to present such preliminary data as evidence of productivity, these data can be attached as a brief (1-3 page) appendix to the written proposal and not count against the page total of the proposal.
4. **Research design and methods.** This section should explain the experimental design and methods used to accomplish the specific aims. It should be clear why an experiment is being conducted and how it is being executed, but judgment should be exercised not to dwell on common methods and procedures that will be familiar to members of the examining committee. The use of figures is encouraged to help explain complicated experimental protocols. It is extremely important to discuss the possible results of an experiment and how those results might be interpreted. The student should acknowledge the limitations of the proposed methods and provide alternate methods to overcome these limitations.

5. **References.** References should be cited as needed in all parts of the proposal. The citations should be complete, including titles of the papers, chapters, or books. Be careful not to over-cite; that is, it is usually unnecessary to cite every paper that supports a particular statement or point but cite the major paper or perhaps a review article.

6. **Figures and tables.** The text should be supported with figures and tables as needed to present data and clarify complicated issues. Tables and figures should be numbered in the order as referred to in the text and have appropriate legends. As a general suggestion, five to ten total figures and tables should be sufficient.

In preparing the proposal, the student and advisor will discuss and outline the contents of the written proposal, and the student will then *independently* write the first complete draft of the proposal. This first draft is an important milestone in the exam process and is intended to convey to the examining committee what the student regards as the final product. Beyond initial discussions of ideas and organization, the supervisor should NOT assist in the actual writing of the first draft or provide feedback from reading the draft prior to completion. Consultation with other graduate students is permitted. The first draft for all students taking the exam will be distributed to all members of the examining committee a month (30 days) before the examination date.

By two weeks (14 days) before the examination date, members of the student's examining committee may have communicated to the student-required revisions of the written proposal. The supervisor and student will then together revise the first draft as appropriate. The final draft of the proposal should be given to all members of the examining committee one week (7 days) prior to the examination date.

It is highly desirable to practice the presentation at research seminars or group meetings. *It is permitted, and even encouraged, that the supervisor practices with the student to refine the presentation before the actual exam.* During the exam, members of the examining committee may (and usually will) interrupt with questions at any time. After the defense of the proposal is completed, the chair of the exam will specifically open the floor to any general questions the examining committee may have about the general breadth and background knowledge not necessarily related to the proposal. This part of the exam is to allow the committee to assess the general research knowledge of the candidate.

After the exam, the candidate will be asked to leave the room, and the committee will discuss the defense and vote by secret ballot whether the student has passed the exam. There are two responses a member of the examining committee may make: P for pass or F for fail. Abstain votes are not allowed and will be counted as a Fail. At least three of the four voting members of the examining committee must vote in favor of passing for the student to pass.

A student who fails the QE may retake the exam **one** time if recommended by the committee. A recommendation to retake requires three members to vote in favor of a retake. Conditions of a retake may vary depending on the recommendations of the committee. For example, the committee may recommend that only the written part be retaken, that only the oral part be retaken, or that the complete exam be retaken. The date of the retake will be set by the committee and, in any case, must take place within six months. A second fail dismisses the student from the Ph.D. program.

2.10 Further Requirements for the Ph.D. degree

After passing the Qualifying Examination, the student continues formal dissertation work with the guidance of the Supervising Committee.

Students are required to regularly present their Ph.D. research to the Department (see BIOL6252 requirement).

Students are strongly recommended to attend and participate in discussions of research presentations from their fellow graduate students. (see BIOL6100 requirement).

The major goal of all our scientific research efforts is the dissemination of new knowledge to the community and public. A peer-reviewed published research manuscript is a traditional way to accomplish this goal. Working closely with their Dissertation Supervisor, students are expected to publish their work in a peer review journal or deposit it on a pre-publication server (e.g. bioRxiv) prior to their graduation. In the absence of a research manuscript publication, the supervising committee, with the input from the Dissertation Supervisor, will determine whether the totality of a student's research is substantive and appropriate for a doctoral thesis.

General UTD requirements for the Ph.D. degree can be found in the graduate catalog. See **Appendix A** for guidelines for setting the oral defense and completion of the dissertation.

3 TYPICAL CURRICULA FOR M.S. STUDENTS

3.1. M.S. Laboratory Research Thesis

Required graduate-level courses:

16	credit hours in Core Courses (BIOL5410, 5420, 5440, 5460)
1	credit hour in BIOL6193 (Colloquium)
6	credit hours (minimum) in graded General Electives
10	credit hours in BIOL6V01 (Research in Molecular Biology)
3	credit hours in BIOL6398 (Thesis)

36	credit hours in total Biology courses
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3.2. Non-thesis M.S. degree

M.S. students who seek instruction in biology for expansion of their professional background may obtain the M.S. degree without a thesis if they satisfactorily complete the following graduate courses with a minimum of 36 credit hours:

16	credit hours in Core Courses (BIOL5410, 5420, 5440, 5460)
9-12	credit hours in graded General Electives (minimum of 4 courses)
8-11	credit hours in General Electives or other appropriate courses (P/F or graded) *

36 credit hours in total.

*With the approval of the Graduate Advisor and the Program Head, other courses appropriate to the student's primary interest can be taken. Up to 8 SCH may be taken as research (BIOL6V03).

3.3 Core Courses

The following core courses are mandatory for all M.S. students:

BIOL5410	Biochemistry
BIOL5420	Molecular Biology
BIOL5440	Cell Biology
BIOL5460	Quantitative Biology

Letter grades are given in all core courses. The GPA in these four core courses, as well as the overall GPA, must be 3.0 (minimum).

3.4. Other Courses

3.4.1 General Electives. Selection among these courses will depend upon the student's interest. However, BIOL6V31 (Molecular Genetics), BIOL6356 (Eukaryotic Molecular and Cell Biology), BIOL6352 (General Biochemistry I), and BIOL6353 (General Biology II) are not to be taken as electives (general or otherwise) for the graduate degree. Instead, these courses are intended as remedial courses for students whose background is determined to be lacking in one or more of these critical areas of study.

3.4.2 Research in Molecular Biology, BIOL6V03 - Supervised experimental research on which the M.S. thesis may be based. This course is offered throughout the year, including summer terms, and is usually taken by students who have satisfied core course requirements.

3.5 Supervising Committee. The Supervising Committee consists of the Supervising Professor plus two additional Biology Faculty members. One committee member can be outside of the Biological Sciences Department.

3.6 Thesis. The thesis will be based on experimental work. Students should be aware that the average time taken to prepare an M.S. thesis exceeds three months. Formatting guidelines are available from the Graduate Dean's office.

3.7 Continuation to Ph.D. Students who are in or have completed the M.S. degree may apply for admission to the Ph.D. program. Section 1 describes the procedure and criteria used.

4 FINANCIAL SUPPORT FOR GRADUATE STUDENTS

4.1 Conditions and Responsibilities

A number of assistantships are available for full-time students, primarily from the following two sources:

State funds for teaching (teaching assistantships):
Federal and private research funds (research assistantships).

Each student awarded an assistantship is paid for working 50% of the official working time as an assistant.

Research assistantships are awarded for assisting faculty members in research, and finding is usually provided from grants.

Teaching assistantships are awarded to help instructors conduct laboratory and lecture courses.

For teaching assistants, travel must be approved by the course instructor and graduate advisor; for research assistants, travel must be approved by the research supervisor. For students with assistantships, a travel authorization must be submitted to the Biology Program Office prior to leaving for travel at other than scheduled holidays. No time off is permitted for Teaching Assistants during scheduled class sessions. All students are entitled to take official holidays (as regularly published by the University). Students with assistantships do not accumulate holiday or vacation time.

Students receiving an assistantship are required to register for at least 9 semester credit hours during the fall and spring semesters. The credit requirement for summer registration will vary. Some of these credit hours may be obtained by registration in other programs if the educational goal of the student justifies this and if prior approval of the Supervisory Committee and Graduate Advisor has been obtained.

4.2 Eligibility for Assistantships

Ph.D. students are provided a Graduation Tuition Scholarship (to pay for tuition), a stipend which is currently \$2,000/month for 12 months, and health insurance. RAs may be paid more. The Ph.D. stipend is awarded annually for Ph.D. students based on maintaining a satisfactory academic record. Support will be withdrawn from students who are not benefiting adequately from the Program, are neglecting their assistantship duties, or who intend to leave the Program before completing their dissertation. The expectation is that support will continue for 10 long semesters. Support beyond 10 long semesters requires approval by the Dean of the NSM School and requires strong justifications. Based on this limitation on the financial support, Ph.D. students need to complete their research and submitted their work as research manuscript(s) within 5 years.

M.S. students may be eligible for TA stipends if there are unfilled TA positions in the Departmental courses and the student is qualified to serve as a TA with appropriate knowledge and training. To be eligible for a TA assignment, M.S. students must have an overall GPA of 3.0. University policy is currently opposed to, but allows, paying M.S. students as TAs. This policy could change. Awarding of a stipend does not result in changing the in-state vs. out-of-state status of an M.S. student and does not affect the tuition paid.

5 THESIS AND DISSERTATION SUPERVISION

5.1 Thesis or Dissertation Sponsor

Students who have satisfactorily completed all required core courses must become associated with a sponsor who will supervise their work for the M.S. (with thesis) or Ph.D. degree. This association is arranged by mutual agreement between the student and faculty member, subject to limitations of laboratory space and facilities, and competition with other students for the same faculty member's time.

5.2 Supervising Committee

5.2.1 The Supervising Professor serves as chairman of the student's Supervising Committee. Requirements for committee composition and reporting to the Graduate Advisor has been previously described.

5.2.2 Formal appointment of the PhD examination committee (the committee that will hear the oral presentation), according to the University rules, is made by the Graduate Dean. However, the Dean's office has never changed the committee approved by the Department.

5.2.3 If a committee member is absent for an extended period, an alternate member may be chosen; a revised committee form must also be submitted to the graduate advisor.

5.2.4 Detailed instructions for preparing theses and dissertations are available in the Graduate Dean's office or at https://graduate.utdallas.edu/current_students/dissertation_and_thesis/.

6 STUDENT PARTICIPATION AND REPRESENTATION IN THE PROGRAM

6.1 Graduate Student Council

Biology graduate students are strongly encouraged to develop and maintain the Graduate Student Council, ensuring self-governance and strong representation and communication from and among the member students. It is strongly recommended that graduate student assembly elects various officers to lead and manage the council.

6.2 Participation of Department Administrative Decisions

When appropriate, student representatives are invited to attend meetings (or parts of meetings) of both the Biology Faculty and the Graduate Education Committee when student matters are being discussed. They are expected to participate actively, presenting their opinions, and arguing the issues. The designated representatives receive written agendas for faculty meetings at the same

time as faculty members. Items for which student participation is appropriate are placed first on the agenda. Similarly, student representatives receive an agenda (or if there is no written agenda, are otherwise informed) for meetings of the Graduate Education Committee.

6.3 Input on Graduate Education

The graduate students evaluate courses and the quality of teaching in them at the end of each semester in which they are offered. Evaluations of instructors are submitted anonymously on forms to be distributed and completed at the end of each semester.

6.4 Requests for Reviews and Actions

The students are encouraged to communicate to the Department Head or Graduate Advisor their opinions formally or informally about any problem that they feel significantly affects their progress. Any student may request specific action on any issue by petitioning the Department Head or Graduate Advisor.

We also recognize that there can be unforeseen challenges along your educational journey, and we are here to help in any way to overcome these challenges. These challenges include mental health, physical health, family concerns, and others. Students are strongly encouraged to reach out to the Dissertation Supervisor, other Faculty members, Graduate Advisor, and/or Department Head about these challenges. The University also has resources to help students with these challenges, including the Student Wellness Center and Office of Graduate Education (see Appendix C).

APPENDIX A

GUIDELINES FOR SETTING THE ORAL DEFENSE AND COMPLETING THE DISSERTATION

1. **SUBMISSION OF DISSERTATION DRAFT TO THE COMMITTEE** - a draft of the dissertation which is satisfactory to both student and supervisor is submitted to each committee member. Figures in these preliminary drafts should be of high quality and clear with respect to content, but they need not be the “final” figures.

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3 weeks (less than 3 weeks may be allowed, but only if agreed to by *all* committee members)

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2. **COMMITTEE FEEDBACK: RETURN OF CRITIQUE** Committee members return dissertation to the student, with overall evaluation and general or specific corrections. Each committee member should make one of the following **general** evaluations:

UNACCEPTABLE

ACCEPTABLE WITH MAJOR REVISIONS

ACCEPTABLE WITH MINOR REVISIONS

ACCEPTABLE NO REVISIONS

If the dissertation is deemed unacceptable by one or more committee members, then the student must return to STEP 1, otherwise the student proceeds to the next step.

If the dissertation is deemed acceptable with corrections necessary then the student and supervisor must decide whether corrections can be made and returned to committee members within 1-2 weeks. If yes, the committee may allow the student to set the date for an oral defense. Prompt return of the dissertation is intended to keep the critiquing process fresh in the minds of committee members. If longer than two weeks is required for the student to make corrections then the committee members must each agree to grant additional time or designate a new target date for return of the corrected dissertation.

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1-2 weeks or longer if granted

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3. **SETTING OF THE ORAL DEFENSE** - At this time each committee member has received a draft of the dissertation, which has incorporated either general or specific changes which were called for in the originally submitted draft or some form of clarification of any misunderstandings which lead to the calling for specific changes. Criteria for the publication requirement must also have been met prior to scheduling of the oral defense.

A request for final oral examination may now be made through the Office for Graduate Studies. This request includes a form, which must be signed by a majority of committee members agreeing that the dissertation is in satisfactory form for the purpose of final examination (this form can be obtained from the Office for Graduate Studies). In addition, a final draft of the dissertation and two

copies of the dissertation abstract are submitted to the Office of Graduate Studies, these documents must be in compliance with UTD regulations for proper style and format of the doctoral dissertation. In addition, the publication requirement must be satisfied at this time (section 2.11)

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2 weeks

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4. THE ORAL DEFENSE - The following is essentially a restatement of the policy set forth by The Office of Graduate Studies. The latest revised instructions for the preparation of Masters theses and Doctoral dissertations states that the thesis/dissertation “should demonstrate the student’s ‘independent research competence’ in his/her field ‘at the level appropriate to the degree being sought’. The successful final defense of the thesis/dissertation confirms this competence...”. There are four possible outcomes of the final oral defense:

ACCEPTED

ACCEPTED PENDING SPECIFIED REVISIONS

ACCEPTED PENDING MAJOR REVISIONS

FAILED

If accepted, the student has maximum of 30 days to submit final version copies to The Office of Graduate Student Studies, and must do so prior to the semester deadline date specified by The Office for Graduate Studies.

If accepted pending SPECIFIED revisions, the student has until the end of the following semester to submit a final version.

If accepted pending MAJOR revisions, the student has 12 months to submit a final version.

If failed, see the specific rules outlined by The Office of Graduate Studies.

The final version must be approved by and carry the original signatures of a majority of committee members.

According to the Office of Graduate Studies, the calling for major revisions at the time of the oral defense, by the committee, is due to something that occurs during the course of the defense itself. If, for example, the student being tested should show a significant deficiency in his/her field of presumed expertise, the student may be required to do further literature research and demonstrate the proper addition to their lack of knowledge by revision, alteration, or additions to the dissertation. Another example, if during the presentation of data it becomes apparent that certain results reported in the dissertation were not properly interpreted or not sufficiently commented on, then revision is justified. However, it is not in the spirit of the rules, as they were written, that one or more committee members enter the oral defense already fixed on the decision to call for revision, unless the revision is of a grammatical or technical nature.

APPENDIX B.

First-year Rotation Evaluation

Student's Name _____

Semester ____

PI _____

Specific aims of the student's project.

Summary of project accomplishments.

Please comment on the following:

Understanding of project objectives, experimental design, and laboratory techniques.

Ability to plan/execute experiments, analyze/interpret data.

Drive, dedication, perseverance.

Ability to interact with other laboratory members.

Oral and/or written presentation skills.

What are the student's greatest strengths?

What are the student's greatest weaknesses?

Overall evaluation.

Faculty Member

Date

Graduate Student

Date

Alternate questions that are meant to be confidential:

Would you take this student into your lab if he/she picks your lab? "Don't know" is an acceptable
answer

Here

If no, please explain.

If yes, would you take this student with or without reservations? Please specify the reservations.

Do you feel the student could do the work required to pass the qualifying exam and complete a PhD?

Was the student passive in the lab (waiting to be told what to do) or more aggressive (sought out information from others, asked questions, and read background to the project)?

Appendix C

Relevant Contacts and Websites

contact	name	email	phone	office
Department Head	Tae Kim	genome@utdallas.edu	972-883-6496	BSB12.629
Graduate Advisor & Associate Department Head	Duane Winkler	Duane.Winkler@utdallas.edu	972-883-3533	FO3.704D
Admin Services Officer II	Heather Oltmann	Heather.Oltmann@utdallas.edu	972-883-2501	BSB12.102G
Graduate Admissions Chair	Zhenyu Xuan	Zhenyu.Xuan@utdallas.edu	972-883-2518	RL4.714
Graduate Support Coordinator	Nancy Yu	Nancy.yu@utdallas.edu	972-883-4797	BSB12.102
Graduate Support Coordinator	Minah Banks	ishaminah.banks@utdallas.edu	972-883-6255	BSB12.102

Links to sites of interest within UTD:

- [Department of Biological Sciences](#)
- [Office of Graduate Education](#)
- [Graduate Catalog](#)
- [NSM Scholarships](#)
- [International Students and Scholars Office](#)
- [Office of Research and Innovation](#)
- [The Student Wellness Center](#)