GRADUATE HANDBOOK
FOR
BIOLOGICAL SCIENCES

DEPARTMENT OF BIOLOGICAL SCIENCES
COLLEGE OF SCIENCE AND ENGINEERING TECHNOLOGY
SAM HOUSTON STATE UNIVERSITY

Revised Summer 2021


ACADEMIC PROCEDURES

APPLICATION / ACCEPTANCE PROCEDURES

Regular Admission. Requirements for regular admission to the graduate school are set forth in the Graduate Catalog and are summarized below (see the Graduate Catalog for more detailed information):

A. Program Admission Requirements

1. A minimum undergraduate GPA, from the baccalaureate granting institution, of 2.5 (on a 4-point scale).

2. Applicants from non-English speaking countries must present a score of at least 78 on the Internet-based (iBT), 550 on the paper version (PBT), or 213 on the computer version (CBT) of the Test of English as a Foreign Language (TOEFL). If English is recorded as the official language, then a TOEFL score is unneeded. SHSU is currently accepting Duolingo scores of at least 105 during the COVID-19 crisis.

   a. Students from the following countries qualify for a TOEFL waiver: Antigua & Barbuda, Australia, Bahamas, Barbados, Belize, Canada (except Quebec), Dominica, Fiji, The Gambia, Ghana, Grenada, Guyana, Ireland, Jamaica, Liberia, New Zealand, Nigeria, Overseas UK territories, Overseas US territories, South Africa, St. Kitts & Nevis, St. Lucia, St. Vincent & the Grenadines, Trinidad & Tobago, and the United Kingdom.

   b. Students who completed undergraduate or previous degree coursework at a university where English was the language of instruction, and have a GPA of 2.5 or higher, may be eligible for a TOEFL waiver. If the Office of Admissions cannot determine if English was the language of instruction at your university, an advisor will contact you to submit additional evidence.

B. MS Program in Biological Sciences Requirements

1. Meet program admission requirements as listed above.

2. An undergraduate degree in biology or a closely related field. Applicants with an undergraduate degree in a discipline other than biology or a closely related field must complete both Ecology (BIOL 3409) and Genetics (BIOL 3450) or equivalent courses prior to being considered for regular admission.

   a. It is recommended that applicants have at least an undergraduate minor in the biological sciences, including ecology and genetics.

   b. The requirement for ecology and genetics can be waived if a student scores ≥70% on the genetics and ecology sections of the MFAT exam.
This exam must be taken within the first two weeks of entering the graduate program.

3. Copies of all undergraduate and graduate transcripts. Unofficial transcripts are permitted during the application process.

4. At least two letters of recommendation. Ideally, these letters are provided by faculty in the undergraduate major field of study that can attest to the likelihood of the applicant succeeding in a masters level graduate program. Letters from faculty with whom the applicant has conducted research are especially recommended.

5. A Statement of Purpose that indicates your promise for success in graduate study. This statement should provide: (1) an introduction including your interests and motivations for pursuing an MS in biology; (2) a synopsis of your undergraduate and previous graduate career as appropriate; (3) a discussion of the relevance of your most recent and/or current activities for graduate studies; and (4) an elaboration on your academic interests including the scope of research within your area of interest.

For a final admissions decision, a holistic review of each student’s application file is completed on a competitive basis by the Graduate Committee that is comprised of 6 faculty members in the Department of Biological Sciences. The Graduate Coordinator serves as the committee chair and is a non-voting member except to break a tie. Currently a 3.0 GPA is required for financial support.

*Conditional Admission.* An applicant whose records are incomplete may be granted conditional admission. Such students will be classified as conditional graduate students until all records are complete and all regular admission requirements are fulfilled. Conditional admission allows for the completion of no more than six hours of graduate credit and is valid for only one semester. All requirements for regular admission must be met prior to enrollment for more than six hours graduate credit.

*Probationary Admission.* An applicant whose records are complete but who do not qualify for regular admission can be granted probationary admission with departmental recommendation and approval from the Dean of the College of Science and Engineering Technology. The student may enroll in graduate courses (maximum 12 hours) to demonstrate they can perform at the graduate level. Students must earn a grade of “B” or better in each course taken under probationary status to be considered for regular admission at the discretion of the graduate committee.

*Preparatory Admission.* A degree-seeking applicant that does not qualify for regular admission and needs to complete one or more STEM courses may be granted preparatory admission.

*Please note that conditional, probationary, and preparatory admission does not guarantee regular admission once deficiencies are met. Only regularly admitted students are eligible for College of Science and Engineering Technology Graduate Assistantship positions.
Post Baccalaureate Admission or Non-Degree Admission. Post baccalaureate classification is assigned to students possessing a Baccalaureate Degree that have not been regularly admitted or conditionally admitted into a graduate program and could be classified as non-degree seeking. Non-degree admission may be granted to a student who does not intend to pursue a graduate degree but who wishes to take courses for professional advancement, licensure, certification, or self-education purposes, and who holds a baccalaureate degree or higher from an accredited university.

International students must meet the same requirements for admission and candidacy as students from the United States. In addition, an evaluation of foreign education credentials is required (formal transcript evaluation), as well as proof of financial support. International students are eligible only for regular admission status.

Transfer Credit. A total of nine (9) graduate credit hours (i.e. 50xx-level and above) may be transferred to SHSU from another accredited graduate program at the discretion of the Graduate Coordinator and the Dean. Transfer credit is not automatic and must be requested by the Graduate Coordinator using a form found on the Office of Graduate Studies website. Only courses with an earned grade of “B” or better may be used as transfer credit. Transferred courses must adhere to the six-year time frame (i.e. courses may not be older than six years at the time of completion of the degree). Exceptions to the six-year rule require approval by the Graduate Coordinator, Dean of the college, and Dean of Graduate Studies.

Graduate (Teaching) Assistantships
Graduate Assistantships are available through the Department of Biological Sciences in conjunction with the College of Science and Engineering Technology and the Office of Graduate Studies. They are limited in number and are awarded on a competitive basis. An Application for a Graduate Assistantship should be submitted to the Graduate Coordinator at the time of application into the program. Applications are available at the end of this Handbook (Pgs. 28 – 29) or from the Graduate Coordinator (jmharper@shsu.edu). Assistantships are typically awarded for a total of four semesters if the student remains in good standing academically (GPA of at least 3.0) and have met appropriate time-dependent requirements. Students that fail to make satisfactory progress and adhere to all deadlines risk losing their teaching assistantship.

*Students are required to apply for a GA position each semester. Failure to do so will remove the student from consideration and their position will be assigned to another student seeking a graduate assistantship.

**A fifth semester of support is possible with approval by the Graduate Committee and the Dean of COSET. To be eligible for a fifth semester of support the student must have turned in their prospectus by their third semester and completed their comprehensive exam by their fourth semester. A memo of appeal outlining why the student feels a fifth semester of support must be submitted to the Graduate Coordinator when applying for a GA position.

Assistantships are awarded on a competitive basis by approval of the Graduate Committee. Students that are awarded assistantships will receive a letter from the COSET Dean and notification from the Biological Sciences Graduate Coordinator. Those students awarded
assistantships may be required to submit additional paperwork to Ms. Kristin Skillern in the Department of Biological Sciences office (LSB 105).

In addition, the office of the Dean of the College of Science and Engineering Technology offers a one-time scholarship for first-time master’s students which is only paid out in conjunction with a Graduate Assistantship. These cannot be separated. First-time master’s students awarded an assistantship for the fall semester are given $2,000 that is split between the fall and spring semesters. This is the only time we will automatically award this scholarship. First-time master’s students awarded an assistantship for the spring semester are given $1,000 that is awarded in the spring semester only. This is the only time we will automatically award this scholarship.

Failure to adhere to departmental policy may result in termination of the graduate assistantship based on noncompliance.

All students who have been awarded a Graduate Assistantship are required to attend the Office of Graduate Studies New Graduate Student Orientation during their first semester in the program, as well as the Department of Biological Sciences TA Training held at the beginning of each fall and spring semester.

**Hourly Teaching Positions**

Students not awarded Graduate Assistantships may be eligible to teach laboratories on an hourly basis. Students interested in hourly teaching positions should contact the Graduate Coordinator (jmharper@shsu.edu) or Ms. Lori Rose, the freshman laboratory coordinator in the Department of Biological Sciences (bio_lah@shsu.edu, LSB 200B).

**Scholarships**

The College of Science and Engineering Technology (COSET) Graduate Recruitment Scholarship is a $1000 competitive scholarship awarded to outstanding students entering their first semester of a COSET master’s program at SHSU that have not been awarded a graduate assistantship. Current MS students are not eligible for the Graduate Recruitment Scholarship.

To be considered for the COSET Graduate Recruitment Scholarship, a student must be: (1) accepted into a master’s program in the College of Science and Engineering Technology; (2) entering their first semester in the program; (3) and maintain their status as a full-time student. Nominations for the scholarship will be accepted from SHSU faculty, or students may self-nominate. An international student applying for the scholarship must have a transcript evaluation on file with the COSET Dean’s office (transcript evaluations by qualified SHSU faculty are acceptable). Currently, a GPA of at least 3.0 is required for financial support.

*An application for the Graduate Recruitment Scholarship can be found here. Applications must be scanned and emailed to Ms. Shellie Armstrong at sda006@shsu.edu by 5:00 pm on the day of the deadline. Paper applications will not be accepted.*

The Graduate Achievement Scholarship is a $1000 competitive scholarship awarded to students demonstrating outstanding academic progress in a COSET master’s program. Current master’s
students, regardless of time in the program (except 1st semester) are eligible. To be considered for the COSET Graduate Achievement Scholarship, a student must be enrolled full-time in a master’s program in the College of Science and Engineering Technology and have an SHSU graduate GPA. Students in their first year of a COSET graduate program who have been awarded a graduate assistantship are not eligible for the scholarship.

Complete applications require:

1) a personal statement from the applicant describing their academic progress toward the degree, including planned graduation date, and progress on the thesis or capstone project (where applicable), and

2) a letter of evaluation from the applicant’s major advisor or graduate program coordinator describing the applicant’s progress toward the degree and overall performance in the graduate program.

Applicants must email their personal statement to Dr. Li-Jen Lester (LYS001@SHSU.EDU) with Graduate Achievement Scholarship in the subject line by 5:00 pm on the day of the deadline.

The letter of evaluation must be emailed directly from the applicant’s major advisor or graduate program coordinator to Dr. Li-Jen Lester (LYS001@SHSU.EDU) by 5:00 pm on the day of the deadline.

The application deadline for the Fall Graduate Achievement Scholarship is July 1st, and the application deadline for the Spring Graduate Achievement Scholarship is December 1st.

In addition, the Office of Graduate Studies offers a $1000 scholarship each fall, spring, and summer semester. Application information can be found on the Office of Graduate Studies website (https://www.shsu.edu/dept/graduate-studies/).

The Department of Biological Sciences also has scholarships available to graduate students. Students should complete an application via Scholarships4Kats to be considered.

Note that out-of-state or international students that receive a scholarship in the amount of at least $1,000 per semester are eligible to pay tuition at the in-state rate.

**HEALTH INSURANCE COVERAGE**

Graduate Assistants and Research Assistants employed half-time (20 hours per week) are eligible to receive a 50% discount on health insurance through the university. Students should contact Human Resources (https://www.shsu.edu/dept/hr/) for more information.

**TRAVEL SUPPORT FOR SCIENTIFIC MEETINGS**

The Office of Graduate Studies has funding available to support travel to scientific meetings. To be eligible, students must be traveling to an event sponsored by a professional organization and
must present their research as either an oral or poster presentation. Travel funds are limited and are awarded on a competitive basis. Contact the Graduate Coordinator and the Office of Graduate Studies for more information (https://www.shsu.edu/dept/graduate-studies/grad-toolkit.html#ff1a129c-085c-402b-bf5c-f3e04ed82941).

**BIOLOGICAL SCIENCES GRADUATE STUDENT ORGANIZATION**

The Biological Sciences Graduate Student Organization (BSGSO) fosters the interest of the graduate students in the Department of Biological Sciences while promoting and supporting academic and social activities of interest to graduate students. BSGSO also serves as a liaison between the graduate students, faculty, staff, and other organizations on campus. Membership is free and is automatic with acceptance into the graduate program in the Department of Biological Sciences. Participation is voluntary. For more information see BSGSO on Facebook: https://www.facebook.com/groups/640644636006531/

**CREDIT HOUR RESTRICTIONS**

The normal course load (to be considered a full-time student) is 9-12 credit hours per full semester and 6 credit hours in the summer in line. An increased academic load (i.e. >12 credit hours) must be approved by the Dean of COSET. Other limitations include:

1. University Graduate and Research Assistants that are employed half-time (20 hours per week) are required to carry a load of at least 6 credit hours per semester for fall and spring semester*.

2. Federal financial aid requires students to be enrolled in at least 18 credit hour per calendar year and at least 6 hours during each regular (fall and spring) semester.

   * Students who enroll in BIOL 6398 or BIOL 6099 for the summer should enroll in the 10-week sections of those courses in order to maintain full-time student status for the summer.

2. Students who wish to use university resources, including library access and access to academic buildings and research facilities during the summer must be enrolled in at least one credit hour during the 10-week summer session or be employed by SHSU during the summer months.
BIOLOGICAL SCIENCES PROGRAM REQUIREMENTS AND PROCEDURES FOR
MASTER OF SCIENCE DEGREE

I. Graduate Coordinator. Dr. James Harper, LSB 300E, jmharper@shsu.edu, serves as the Graduate Coordinator for all students seeking a MS degree in the Department of Biological Sciences. The Graduate Coordinator oversees official academic records of all graduate students and is the contact person for graduate students submitting official paperwork. It is recommended you report to the Graduate Coordinator each time you need to file a document. The Graduate Coordinator will assist you with course selection as appropriate or until you have chosen your thesis advisor and advisory committee.

II. Program Requirements.
   a. All MS students must complete both BIOL 5301 and 5302 within their first two semesters of course work. BIOL 5301 must be taken first regardless of semester of entry (i.e. Fall or Spring). BIOL 5301 or 5302 are not offered during the summer session.

   b. Students are required to attend the weekly Departmental Seminar Series. A checklist/sign-in sheet will be maintained to monitor graduate student attendance at seminar unless otherwise indicated.

   c. Adherence to all program procedures and deadlines, in addition to satisfactory progress toward completing their thesis, is necessary for continuance of graduate assistantship support and enrollment in the graduate program. Failure to adhere to departmental policy may result in termination based on noncompliance. The Graduate Committee will meet to review graduate student compliance with program policies on a per need basis. Should a student be discovered to be non-compliant, a disciplinary hearing for the student will be held with the Graduate Committee to determine a course of action.

   d. Academic Probation and Suspension. A student who earns a total of two grades of C in any combination of courses will have their graduate status reviewed by the Graduate Committee of the Department of Biological Sciences. The committee will consider the advisability of their continued enrollment in a graduate program. A student who earns three grades of C or one grade of F will be terminated from graduate studies. An appeal for a review of the termination of graduate status should be directed in writing to the COSET dean.

A student who earns three grades of C or one grade of F will be terminated from graduate studies. An appeal for a review of the termination of graduate status should be directed in writing to the COSET dean.

If a student's cumulative grade point average falls below 3.0, the student is automatically on scholastic probation. Probation must be removed within one semester or the student will be subject to suspension. To achieve and remain in good academic standing, a graduate student must maintain an overall grade point average of at least 3.0 (B) on all graduate course work attempted. An overall GPA of 3.0 is the absolute minimum required for graduation. Any graduate student whose GPA falls below 3.0 at the close of any semester or summer session during which one or more semester hours are attempted will be placed on probation. Summer school (two sessions) is a unit equivalent to a semester.
Academic actions (e.g. probation) are based on the total Sam Houston State University record and are implemented at the close of the fall and spring semesters, and the close of summer school.

The COSET dean may place on probation, retain on probation, or suspend any student deficient in grade points without regard to the regulations previously stated. Any appeal for a review of the termination of graduate status should be directed in writing to Graduate Coordinator. The Graduate Committee will review the appeal and will forward their recommendation to the Chair of the Department of Biological Sciences. The chair will then forward their recommendation to the COSET dean.

e. **Degree Documentation.** Each student is responsible for submitting necessary paperwork to the Graduate Coordinator in a timely manner. The timetable and checklist provided in the Graduate Handbooks should be used for reference. Please note that deadlines for the Department of Biological Sciences may be earlier than deadlines in the Graduate Catalog, Schedule of Classes, or the office of the dean.

f. **Graduate Student Evaluation.** Graduate students are required to complete a Graduate Student Evaluation form at the end of each semester that they are enrolled. This requires a self-evaluation by the student as well as an evaluation from the student’s thesis advisor and GA supervisor (when applicable). Failure to complete and file this form with the Graduate Advisor will result in the in the loss of additional GA support if requested.

g. **Major Advisor.** Each student must choose a faculty member from the Department of Biological Sciences at SHSU to serve as their Major (Thesis) Advisor (see Appendix for Advisor – Student Agreement form) **by the end of the first semester**. Identification of a Major Advisor is not required for program admittance for domestic students but is strongly encouraged. International students **must** identify a faculty member **that has agreed to serve as the Major Advisor** for admittance. Documentation of this agreement must be provided.

The Major Advisor serves as the chairperson of the student’s Advisory Committee and will aid the student with choosing courses and guiding research efforts. First semester students lacking a Major Advisor should choose coursework under advisement of the Graduate Coordinator. A signature from the Major Advisor or the Graduate Coordinator is required on all official paperwork. Per University policy, the Major Advisor must have Master level graduate faculty status or higher as verified by the Graduate School. If there is a change in the Major Advisor, a revised Advisor-Student Agreement form (see Appendix) should be submitted to the Graduate Coordinator. The former Major Advisor must be notified of the change by the student; permission must be granted by the former advisor for the student to use any intellectual property belonging to the former advisor.

h. **Advisory (Thesis) Committee.** With the assistance of the Major Advisor, the student will select a minimum of two additional faculty members from the Department of Biological Sciences at SHSU to comprise their Advisory Committee. Additional members may be selected if desired. These individuals may be from outside the Department of Biological Sciences or Sam Houston State University. Committee members from outside SHSU must
be approved by the Dean of Graduate Studies to serve on the committee (see the Office of Graduate Studies website to complete a form to request approval).

Per University policy, all Advisory Committee members must have Associate level graduate faculty status or higher, including those from outside the department. The Advisory Committee must be selected by the end of the second semester and an Advisory Committee form must be submitted to the Graduate Coordinator at this time. It is the role of the Advisory Committee to work with student to establish an appropriate course sequence and plan of research to attain the student’s goals. The student must meet with their Advisory Committee bi-annually (approximately every six months) and prepare a progress report for committee approval. A Record of Bi-Annual Committee Meeting form (see Appendix) should be submitted to the Graduate Coordinator following each meeting. Should the student’s Advisory Committee change, a revised Advisory Committee form should be submitted to the Graduate Coordinator.

i. Course Requirements. A list of appropriate courses is found in the Graduate Catalog (available at https://www.shsu.edu/home/catalog.html). However, each student’s program may be tailored to fit their individual needs and interests (see below*). The degree requires a minimum of 30 hours of course work. This includes 6 hours of thesis credit (BIOL 6398 & 6099) in addition to the required BIOL 5301 and 5302. Should a student elect to include a minor, the degree includes 36 hours of course work (12 hours are taken in the minor field).

Note: The Department of Biological Sciences does not allow Q-drops for regular graduate students. Any student dropping a course will be terminated from the program.

*Students may petition to have courses outside of the biology degree plan be applied toward their MS Biology degree in writing to the Graduate Coordinator as a memo. This memo should include justification as to why the course is important for the student’s thesis project/academic goals/career goals, et cetera. A recommendation regarding the student’s petition will be made by the Graduate Committee, but final approval comes from the Department Chair and Dean of the College of Science and Engineering Technology.

BIOL 6398 and 6099. At least six credit hours (but more is permissible) of the degree plan must be dedicated to thesis research hours, with at least 3 credit hours taken in BIOL 6398 and at least three taken in BIOL 6099. Graduate students may not enroll in thesis hours until the prospectus has been approved by the thesis committee and submitted to the COSET Dean’s office; although student’s with sufficient credit hours after completing both BIOL 5301 and 5302 may request permission to enroll in thesis research hours at the discretion of the Graduate Coordinator, for example during the summer session. Once the requirement of a minimum of six thesis credit hours has been reached, the student must enroll in at least one credit hour of BIOL 6099 every semester until graduation.

Enrollment in thesis research hours requires final approval by the Graduate Coordinator each time. Permission for enrollment should be requested by completing an
Instructor’s Approval for Enrollment in a Thesis Course form, available in the Department’s main office.

PLEASE NOTE: Students must maintain at least a half-time enrollment status (or six credit hours) to receive federal financial aid or receive a graduate assistantship. Exceptions to this rule for the graduate assistantship may be requested by the Graduate Coordinator in writing to the Dean’s office with final approval provided by the Dean of the Graduate College.

j. **Thesis Prospectus.** The candidate, in consultation with the Major Advisor, will select a subject of investigation and determine the availability of the required sources, facilities, materials, and equipment for the proposed research, as well as writing the thesis. The student will prepare a thesis prospectus which will specify the thesis topic, detail the purpose of the proposed investigation, describe the proposed method(s) of investigation, indicate the relationship of the study to relevant research findings in the student's area of concentration, and provide a commentary on source materials and/or facilities available for the successful completion of the research.

The thesis prospectus must be submitted to the Advisory Committee for approval. After the committee has approved and signed the prospectus, it is submitted to the office of the Dean of COSET for final approval. Significant changes in topic or the proposed method of investigation must be approved in writing by the thesis committee and submitted for approval to the COSET Dean’s office. Minor changes in topic or method of investigation can be made at the discretion of the advisory committee.

*The thesis prospectus should be submitted for final approval no later than the end of the student’s first year in the graduate program.* See Appendix for Thesis Prospectus Guidelines.

k. **Bi-Annual committee meetings.** Students are expected to hold a meeting with their Advisory Committee at least bi-annually. Students should bring the **Record of Bi-Annual Committee Meeting** form to be completed and signed at the end of the meeting. The signed form should be turned in to the Graduate Coordinator.

l. **Continuous enrollment requirement.** Per University policy, once a student enrolls in a thesis course (BIOL 6398 or BIOL 6099), the student must continue to enroll in at least 1 credit hour of a thesis course each semester until the student graduates. For example, once a student enrolls in BIO 6398, the student must enroll in BIO 6099 the following semester and continue to enroll in at least once credit of BIOL 6099 every semester until graduation. The student may opt to select the 1-credit hour section of BIOL 6099 after a 3-credit hour section of BIOL 6099 has been completed. Students should enroll in the 10-week offering of BIOL 6398 or BIOL 6099 during the summer semester to maintain full-time status over the entire summer. **To register for BIOL 6398 or BIOL 6099, an Approval for Enrollment in a Thesis Course form must be completed and submitted to the Graduate Coordinator.** This form may be obtained from the Biological Sciences main office (LSB 105).
m. **Comprehensive Exam.** All MS degree candidates must pass a Comprehensive Exam, written and/or oral, over the graduate course work of their degree program. The Comprehensive Exam will be administered by the Comprehensive Examination Committee, which is the same as the student’s Advisory Committee. The comprehensive exam should be completed **no later than the third long semester** in the graduate program and may not occur in the same semester as graduation. The content and format of the comprehensive exam is at the final discretion of the Advisory Committee.

Upon completion of the exam, the Advisory Committee will evaluate the student’s performance to declare whether they PASS or FAIL the exam. Students that pass may continue toward graduation according to the timetable. Those students that fail must retake the exam within one semester or at the discretion of the Advisory Committee. Students that fail the comprehensive exam a second time are terminated from the program.

n. **Thesis.** The thesis requirement consists of an original written document over the student’s research findings completed in compliance with the project’s prospectus. In addition, the student must give a public presentation of their thesis research during normal working hours. Finally, the student is subject to a thesis defense wherein the candidate for the degree of Master of Science defends their research hypothesis, research methods, and research results to their Advisory Committee.

Thesis guidelines, including formatting and submission deadlines, as well as relevant policies, procedures and issues of compliance (e.g. IRB or IACUC approval) are available at [https://www.shsu.edu/dept/graduate-studies/theses-and-dissertations.html](https://www.shsu.edu/dept/graduate-studies/theses-and-dissertations.html). The One to One program is also available to master’s students engaged in thesis research to aid with utilizing library resources: [https://library.shsu.edu/services/one-to-one/index.html](https://library.shsu.edu/services/one-to-one/index.html). Assistance with writing and formatting can be obtained via the Academic Success Center (ACE): [https://www.shsu.edu/centers/academic-success-center/](https://www.shsu.edu/centers/academic-success-center/).

Although the thesis is submitted electronically, **the Department of Biological Sciences requires that the student have at least one copy of their thesis professionally printed and bound** for the Departmental Thesis Library. A second copy for the student’s Major Advisor is recommended, but not required. Students may have additional copies printed for the remaining members of their Advisory Committee as desired. It is recommended that you ask your committee members if they desire a copy. The Vireo Electronic Submittal System provides the student with several different services by which they can request a printed and bound copy.

o. **One semester prior to the semester of expected graduation:** The student must file a degree application in the Registrar’s Office (see current Deadlines for Graduation in the Appendix).

p. **During the semester in which graduation is expected:** MS candidates must be enrolled in **BIOL 6099** during the semester of graduation (Fall, Spring or Summer). If the student fails to graduate that semester, he or she will have to continue to enroll in BIOL 6099 each semester until graduation. **There are no exceptions to this policy from the Office of Graduate Studies.** An approved, final copy of the thesis must be submitted to the Dean of
the College of Science and Engineering Technology by the date specified by the College. The student’s Advisory Committee and the Department Chair must approve the thesis prior to submission to the Dean. Additional deadlines may be put in place by each Advisory Committee so that adequate time is available for review and corrections.

q. Once the thesis has been approved by all Advisory Committee members, an electronic route sheet should be started. This route sheet is available on the Graduate School’s Thesis and Dissertation website: https://www.shsu.edu/dept/graduate-studies/theses-and-dissertations.html. At the same time, a copy of the Advisory Committee thesis page with signatures of all Advisory Committee members must be submitted to the COSET Dean’s office, along with an electronic copy of the student’s thesis. The COSET Dean’s office will not approve the route sheet until all items have been submitted. The completed route sheet serves as proof to the Registrar that the thesis has been completed and that all thesis requirements have been met for graduation.

r. To graduate, the student must schedule a public seminar. An announcement for the public seminar must be posted publicly in the Department at least two weeks in advance of the seminar. An announcement must be posted to the video displays in the Life Sciences Building, and an e-mail must be sent to all faculty members in the Department of Biological Sciences informing them of the date, time, and location of the seminar. The seminar can take place during the fall, spring, or summer semesters, while classes are in session. It should be given during the student’s last semester in the program. The final defense may follow the public seminar, but this is not required. The student should expect to have to present their research seminar a second time, however, if the defense does not follow the public seminar.

A reasonable final draft of the thesis may not be submitted to the student’s Advisory Committee later than two weeks prior to the scheduled defense unless all members of the committee agree. This is meant to allow ample time for the committee to read and edit the thesis as they see fit. Graduate students must obtain approval from all thesis committee members prior to scheduling their thesis defense.

s. At the time of the defense, a Report of Thesis Examination form (available on the COSET website) should be brought to the final defense by the student. This form will be completed at the completion of their thesis defense and submitted to the Dean’s office regardless of outcome (Pass/Fail). This form must be signed by all members of the advisory committee. A copy of this form should also be filed with the Graduate Coordinator. Those students that fail must retake the exam within one semester or at the discretion of the Advisory Committee. Students that fail the thesis examination a second time are terminated from the program.

t. Students participating in the Commencement Ceremony must arrange for a cap and gown at the University Bookstore at least two months before expected graduation.


**Timetable of Procedures and Processes**

**First regular (i.e. fall or spring) semester:**
1) Enroll in BIOL 5301
2) Submit Major Advisor and Advisory Committee forms to the Graduate Coordinator for review and approval (see Appendix and the COSET website, respectively, for forms).

**Second regular semester:**
1) After completion of 6 graduate credit hours, all non-regular admission students must apply for regular admission and must have removed all conditional requirements.
2) Enroll in BIOL 5302
3) Work toward completion of the Prospectus (see Appendix for Prospectus Guidelines).
4) **Prior to the submission of the prospectus and conducting research:** projects that involve vertebrate animal or human subjects must be approved by the Institutional Animal Care and Use Committee (IACUC, animal research) and/or the Institution Review Board (IRB, human subjects) as appropriate. Forms and information may be obtained from the Office of Research and Sponsored Programs (OSRP) website: [https://www.shsu.edu/dept/office-of-research-and-sponsored-programs/](https://www.shsu.edu/dept/office-of-research-and-sponsored-programs/). Contact Sharla Miles (sharla_miles@shsu.edu) for additional information. Failure to comply will result in non-acceptance of the final thesis, regardless of outcome.
5) **Before the start of the third semester,** the thesis prospectus must be approved by the Advisory Committee, Department Chair, and Academic Dean (see COSET website for the Thesis Prospectus Approval form). The approved thesis prospectus should be filed with the Graduate Coordinator.

**Third regular semester:**
1) Successfully complete Comprehensive Exam. **The Comprehensive Exam should be completed during the third semester.** After the exam, the Report of Comprehensive Examination form (see COSET website) should be submitted to the Graduate Coordinator.
2) Continue research and coursework for appropriate degree plan

**Fourth - Sixth regular semesters:**
Continue research and coursework for appropriate degree plan

Many research projects will involve more than four semesters for completion. The student and the student’s Major Advisor may together petition the Graduate Committee in writing for a fifth semester of graduate assistantship support, although support is not guaranteed.

**Summer semesters:**
1) Students should take any available classes pertinent to the discipline.
2) Students should be heavily involved in their research.
GRADUATE COURSES
See the most recent Graduate Catalog for up-to-date information about graduate courses offered.

RESEARCH FUNDING SOURCES
There are many sources available to support costs associated with graduate student research. Listed below are a few sources. Students are encouraged to consult with their Major Advisors regarding other potential funding sources in their particular disciplines.

1) Joey Harrison Student Research Award
Funds graduate and undergraduate research
Deadline: Variable, once per academic year
Administered by: Department of Biological Sciences
Amount: $500 to $1000
Contact: The Chair of the Joey Harrison Student Research Award Committee for application requirements

2) Graduate Studies Conference Travel Funds
Please see Travel Support for Scientific Meetings in this handbook for more information.

3) Texas Academy of Sciences Student Research Awards
Funds graduate and undergraduate student research in all areas of science
Deadline: Usually December or January
Amount: Up to $2000
Restrictions: Must attend meeting to receive award and agree to present research at the meeting the following year
See website for more information: https://www.texasacademyofscience.org/research-awards

4) Grants-in-Aid of Research Program
Funds graduate and undergraduate student research in all areas of science
Administered by Sigma Xi
Deadline: March 15 and October 1 annually
Amount: up to $1000
Restrictions: Student, major advisor or a committee member should be a Sigma Xi member. See website for more information: https://www.sigmaxi.org/programs/grants-in-aid/apply
APPENDIX

PROSPECTUS GUIDELINES, FORMS & CHECKLIST
**THESIS PROSPECTUS GUIDELINES**  
*(AT THE FINAL DISCRETION OF THE ADVISORY COMMITTEE)*

**General guidelines:** The proposal should be double spaced, with 1 inch margins, 12 point font, and page numbers in the top right corner of each page. The length should be no more than 12 pages of text for sections A - E below. The student’s advisory committee may choose a specific format that differs from the general guidelines below.

A. **Introduction (4 – 5 pages)** – Provides relevant background material and a brief overview of the significance of the proposed research to the field of study including appropriate supporting literature citations. Include past and present research on your specific research topic.

B. **Hypotheses/Objectives** - Clearly state the objectives/aims of your study with reference to the specific hypotheses to be tested.

C. **Methods and Materials** - Describe the methods to be used in as much detail as possible as appropriate. A detailed description of routine protocols is unnecessary. This section should include a clear overview of the statistical analyses to be performed.

D. **Expected Results** - Describe the expected outcome for the research activities based on literature and previous work.

E. **Significance of the Proposed Research** - Provide an overview of the significance of the anticipated results for the specific field of study. Indicate how the research conducted moves the field of study forward. For example, ask “How will doing this research benefit us or improve the general knowledge of science?”

F. **Literature Cited** - a listing of sources of information cited in the proposal in a formal scientific format appropriate to the discipline.

G. **Budget** - Provide an itemized budget for your research. Indicate how the research will be funded and the facilities required for the research.
FORMS:
who signs them and where they are submitted:

Internal Documents to be submitted to Departmental Graduate Coordinator (in order of appearance):

1) **Graduate Student Contract**
   This form is to be signed by the student. It is due to the Graduate Coordinator at the beginning of the first semester.

2) **Graduate Data Contract**
   This form is to be signed by the student and submitted to the Graduate Coordinator at the beginning of the first semester.

3) **Advisor–Student Agreement**
   This form is to be signed by both the student and their Major Advisor. It is due to the Graduate Coordinator by the end of the first semester.

4) **Record of Bi-annual Committee Meeting**
   This form is to be signed by both the Major Advisor and the remaining members of the student’s Advisory Committee. It is due to the Graduate Coordinator after each committee meeting.

5) **Graduate Assistantship Application**
   This form is to be used to apply for a Graduate (Teaching) Assistantship. First time applicants and those seeking continued support for a GA position must complete and submit the application each semester as applicable.

6) **Semester Graduate Student Evaluation**
   This form is to be filled out and signed by the student, advisor, and instructor of the classes the student for which the GA serves. It is due to the Graduate Coordinator at the end of the 12th class week of each semester the student is enrolled.

External Documents to be submitted to the Dean’s office:

All of the forms below can be found in PDF format on the College of Science and Engineering Technology website under the “Forms” and then “Forms for Graduate Students” links.

1) **Advisory Committee Form**
   This form is to be signed by the student, the Major Advisor, the remaining Advisory Committee members and the Graduate Coordinator. After the Graduate Coordinator has signed the form the student will then submit the form to the Dean’s office. This form is due by the end of the second semester.

2) **Thesis Prospectus Approval Form**
   This form is to be signed by the Advisory Committee, the Department Chair, and the Dean of COSET. The Thesis Prospectus Approval Form must be submitted by the end of the student’s first year in the graduate program.
3) **REPORT OF COMPREHENSIVE EXAMINATION FORM**
   This form is to be signed by the student’s Major Advisor and the remaining members of the student’s Advisory Committee. The form should be brought to the student’s Comprehensive Examination. The form will be signed after the completion of the examination with the committee’s recommendation to pass or fail the student. Once the committee members have signed the form, the student will take the completed form to the COSET Dean’s office.

4) **REPORT OF THESIS EXAMINATION FORM**
   This form is to be signed by the student’s Major Advisor and the remaining members of the student’s Advisory Committee. The form should be brought to the student’s thesis defense/examination. The form will be signed after the completion of the thesis examination with the committee’s decision to pass or fail the student. Once the committee members have signed the form the student will take the completed form to the COSET Dean’s office.
GRADUATE STUDENT CONTRACT

I, _________________________________ have received a copy of the Graduate Handbook from the Department of Biological Sciences. I understand that I am expected to abide by all policies, deadlines, and timelines set forth both in this handbook and those found in the Graduate Catalog, Schedule of Classes, and Thesis Requirements. I also acknowledge that it is my responsibility, and not the Graduate Coordinator nor members of my advisory committee, to see that I meet these obligations and deadlines. Additionally, I agree that my admission status as well as any financial support provided by the Department of Biological Sciences and College of Science and Engineering Technology may be withdrawn if I have not followed these policies in good faith.

Signed: _______________________________ Date _____________________

Expected Graduation (Semester, Year): _________________________________

Contact Information:

Email: ___________________________ Local Phone Number: _________________
Cell Phone Number: __________________ Permanent Phone Number: _________________

Permanent Address: _______________________________________

___________________________________
I __________________, hereby agree to regularly back up on, multiple hard drives, my data, prospectus, thesis, Powerpoint slides, et cetera. I acknowledge that the loss of my data will not be accepted as a valid excuse for failing to meet the deadlines outlined in the Graduate Handbook.

______________________________
Signature

______________________________
Date
ADVISOR – STUDENT AGREEMENT
(Submit to Biology Graduate Coordinator by the end of the Student’s First Semester)

STUDENT NAME: _________________________________________________________

DEGREE SOUGHT: MS MS WITH MINOR

MINOR: ______________________

I, ____________________________ agree to be the major advisor to (print/type name)

______________________________________________

(print/type name)

MAJOR ADVISOR SIGNATURE DATE

STUDENT SIGNATURE DATE

Primary Responsibilities of Major Advisor:

1) Chair Advisory Committee

2) Provide student with research guidance (topic selection, experimental design, writing prospectus, grant proposals and final thesis)

3) Return paperwork in a timely manner

Primary Responsibilities of Student:

1) Communicate regularly with Major Advisor and Advisory Committee

2) Adhere to program deadlines

3) Attend Departmental seminars
RECORD OF BI-ANNUAL COMMITTEE MEETING  
(Submit to Biology Graduate Coordinator after Each Committee Meeting)

DATE: ____________________________________________

STUDENT NAME: _______________________________________________________

DEGREE SOUGHT:  MS  MS WITH MINOR

MINOR: ______________________

DATE ADMITTED: _______      EXPECTED GRADUATION DATE: ___________

PROGRESS TOWARD DEGREE:  SATISFACTORY  UNSATISFACTORY

COMMITTEE RECOMMENDATIONS:

ADVISORY COMMITTEE SIGNATURES:

Major Advisor
How to apply:
1. Fill in this form electronically and save it as a PDF
   a. You MUST complete Pages 1 and 2; incomplete applications will not be considered
2. Email the completed PDF to Dr. Harper at jmharper@shsu.edu

Provide the following information:

Name: Click or tap here to enter text.
Sam Username (e.g. xyz001): Click or tap here to enter text.
Six Digit Sam ID: Click or tap here to enter text.
Email: Click or tap here to enter text.
Phone: Click or tap here to enter text.

Present Semester in Graduate School: Choose an item.
Current SHSU GPA: Click or tap here to enter text.

Present Semester as a GA in Biology at SHSU: Choose an item.

This application is for which semester:
Choose an item.

Please indicate the year:
Choose an item.

Would this be your first semester as a GA?
Yes ☐ No ☐
If no, please indicate semester requested: Choose an item.

Are you requesting a fifth semester as a GA?
Yes ☐ No ☐

My ranked preference of courses for a Graduate Assistantship are:
1st Choice: Click or tap here to enter text.
2nd Choice: Click or tap here to enter text.
3rd Choice: Click or tap here to enter text.

*Note: this does not ensure you will be assigned a particular course. Final assignments will be based on departmental need.
Additional Information

Graduate Field of Instruction (e.g. taxonomy, cell biology): Click or tap here to enter text.
Name of Major Advisor: Click or tap here to enter text.
Your Thesis Topic: Click or tap here to enter text.

Name ALL institutions of collegiate standing that you have attended. Include the following information: Name of institution, Degree, Degree dates (conferred or expected).
Click or tap here to enter text.

List the courses for which you have been a GA in the past:
Course, Year, Semester, Instructor and Institution.
Click or tap here to enter text.

List any courses taken that are relevant to being a GA in a biology course, especially non-major and introductory level courses (e.g. Contemporary Biology).
(e.g., Courses in Physiology, Biochemistry, Ecology, ETC.).
Click or tap here to enter text.

List other experiences and skills applicable to teaching biology.
Click or tap here to enter text.
OBJECTIVE
Forum for graduate students and major advisors to evaluate student performance and expectations.

DIRECTIONS:
1. Fill out each question to the best of your ability. This document will be a guide for individual program and performance expectations. Answers should be: 1) objective rather than subjective; 2) provide an overview of behavior rather than traits; and 3) be specific to the current semester.
2. Students should complete the form prior to forwarding it to their major advisor. Only electronic copies of the form will be accepted.
3. After completion, the major advisor should submit the form directly to the Graduate Coordinator via email (jmharper@shsu.edu).
4. For students on a Graduate (Teaching) Assistantship, the Graduate Assistantship Performance Evaluation Appendix should be completed by the student and instructor/lab coordinator as appropriate.

STUDENT/MAJOR ADVISOR INFORMATION:
1. Student name: Click or tap here to enter text.
2. Date of degree program start (mm/yyyy): Click or tap here to enter text.
3. Current semester in program: 2nd
4. Date of most recent committee meeting (mm/yyyy): Click or tap here to enter text.
5. Name of Major Advisor: Click or tap here to enter text.

ACCOMPLISHMENTS:
1. NEW STUDENTS ONLY: What do you hope to accomplish professionally in the upcoming year?
2. RETURNING STUDENTS ONLY: What have you accomplished in the past year and what do you hope to accomplish professionally in the upcoming year?
   Student comments: Click or tap here to enter text.
   Major Advisor comments: Click or tap here to enter text.

BARRIERS/BRIDGES TO/FOR SUCCESS:
Student comments: Click or tap here to enter text.
Major Advisor comments: Click or tap here to enter text.
**PERFORMANCE EVALUATION:**
It is expected that students will take the lead in proposing Performance Expectations which will then be altered/modified in consultation with the student’s major advisor at the beginning of each semester. Information in the Performance Expectation column is meant to serve as an example. Students will work with their major advisor to determine or modify Performance Expectations each semester as needed with performance expectations for the following year developed as well. The Rating Column is to be used by the major advisor to provide the student with guidance on their performance in each category. Clearly, student year in the program will play a significant role regarding what is expected form the student; progress will be evaluated at the end of each semester.

<table>
<thead>
<tr>
<th>THEME</th>
<th>CRITERIA (as applicable)</th>
<th>EXPECTATIONS</th>
<th>RATING (Major Advisor Only)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree Program</td>
<td>Prospectus/Thesis Progress</td>
<td>Click or tap here to enter text.</td>
<td>Click or tap here to enter text.</td>
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<td></td>
<td>(i.e. written progress)</td>
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<tr>
<td>Data Collection &amp; Analysis</td>
<td>Click or tap here to enter text.</td>
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<tr>
<td>(i.e. status of research)</td>
<td>Click or tap here to enter text.</td>
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<tr>
<td>Research/Writing Goals</td>
<td>Click or tap here to enter text.</td>
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<tr>
<td>Coursework (completed)</td>
<td>Click or tap here to enter text.</td>
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<tr>
<td>GPA</td>
<td>Click or tap here to enter text.</td>
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<td>Comprehensive Exam</td>
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<tr>
<td>Target completion Date</td>
<td>Click or tap here to enter text.</td>
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<tr>
<td>Professional &amp; Academic Activities</td>
<td>Publications</td>
<td>Click or tap here to enter text.</td>
<td>Click or tap here to enter text.</td>
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<tr>
<td>Communication</td>
<td>Outreach</td>
<td>Click or tap here to enter text.</td>
<td>Click or tap here to enter text.</td>
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<tr>
<td></td>
<td>Oral Communication</td>
<td>Click or tap here to enter text.</td>
<td>Click or tap here to enter text.</td>
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<td></td>
<td>Transparency</td>
<td>Click or tap here to enter text.</td>
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<td></td>
<td>Written Communication</td>
<td>Click or tap here to enter text.</td>
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<tr>
<td>Time Management</td>
<td>Dependability</td>
<td>Click or tap here to enter text.</td>
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<td>Punctuality</td>
<td>Click or tap here to enter text.</td>
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<td>Organization</td>
<td>Click or tap here to enter text.</td>
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<td></td>
<td>Prioritization</td>
<td>Click or tap here to enter text.</td>
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<tr>
<td>Other</td>
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</tbody>
</table>
ACTION PLAN: What steps will be taken to resolve unsatisfactory performance or to maintain satisfactory performance?

Student comments: Click or tap here to enter text.

Major Advisor comments: Click or tap here to enter text.

Name of Student: Click or tap here to enter text.

Signature: ________________________________

Name of Major Advisor:

Signature: ________________________________
APPENDIX
GRADUATE ASSISTANSHIP PERFORMANCE EVALUATION

To be completed by the course instructor or laboratory coordinator as appropriate. Please complete the table below and submit directly to the Graduate Coordinator via email (jmharper@shsu.edu). Please do not return this form to the student.

Student being evaluated:

Course(s) for which student was a GA:

Semester (Fall, Spring, Summer) & Year:

<table>
<thead>
<tr>
<th>Knowledge of Subject</th>
<th>Unacceptable</th>
<th>Needs Improvement</th>
<th>Meets Expectations</th>
<th>Exceeds Expectations</th>
<th>Not Applicable</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
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<td>Click or tap here to enter text.</td>
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<tr>
<td>Preparation for Course Activities</td>
<td>☐</td>
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<tr>
<td>Rapport with students</td>
<td>☐</td>
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<tr>
<td>Cooperation with peers</td>
<td>☐</td>
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<tr>
<td>Cooperation with instructor/supervisor</td>
<td>☐</td>
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<tr>
<td>Provides helpful feedback</td>
<td>☐</td>
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<tr>
<td>Grading accomplished in a timely manner</td>
<td>☐</td>
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<tr>
<td>Oral communication skills</td>
<td>☐</td>
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<tr>
<td>Overall performance</td>
<td>☐</td>
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</tbody>
</table>

Would you recommend this student for a GA position again?  Yes ☐ No ☐

Name of Supervisor: Click or tap here to enter text. Signature: ________________________________
# Checklist for MS Candidates in the Biological Sciences
*(To be kept in student file)*

**Name**

<table>
<thead>
<tr>
<th>Task</th>
<th>Date</th>
<th>Signature</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Obtain copy of Departmental Graduate Handbook</td>
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<tr>
<td>2. Meet with Graduate Coordinator</td>
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<tr>
<td>3. Major Advisor selected</td>
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<tr>
<td>4. Advisory Committee established</td>
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<tr>
<td>6. Submit forms for transfer/undergraduate credits</td>
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<td>7. Advisory Committee meeting 1 — year one</td>
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<td>8. Advisory Committee meeting 2 — year one</td>
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<td></td>
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<tr>
<td>9. Advisory Committee meeting 1 — year two</td>
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<td></td>
</tr>
<tr>
<td>10. Advisory Committee meeting 2 — year two</td>
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<td></td>
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<tr>
<td>11. File degree application for graduation</td>
<td></td>
<td></td>
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<tr>
<td>12. Comprehensive exam scheduled</td>
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<tr>
<td>13. Comprehensive exam completed</td>
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<tr>
<td>14. IACUC or IRB Forms submitted (as needed)</td>
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<td>15. Thesis prospectus approved</td>
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<tr>
<td>16. Enroll in BIO 6398</td>
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<td>17. Enroll in BIO 6099</td>
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<tr>
<td>18. Public seminar of thesis research scheduled</td>
<td></td>
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<tr>
<td>19. Thesis seminar and defense completed</td>
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<tr>
<td>20. Thesis approved</td>
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</tbody>
</table>