Department of Biological Sciences
Graduate Student Handbook

POLICIES AND PROCEDURES OF THE GRADUATE DEGREE PROGRAMS

Revised and approved as of July 10, 2026. All Information on policies at the University and College level are accurate and current to the best of our knowledge. Policies at the University and College level can change at any time and these changes may become effective immediately.

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I. Overview

The Department of Biological Sciences strives to provide a scholarly environment where faculty and students are stimulated to become productive scientists and educators. We encourage variability among students in their individual graduate programs to inspire individual thinking and imagination, which are critical skills in the sciences. The principal aim of the Department's graduate programs is to help students achieve the highest level of their scientific potential and become thoughtful, productive, and responsible members of their scientific community. Graduate students in the department, as well as interdisciplinary students housed in the department, are expected to:

- Attend weekly departmental seminars
- Participate in departmental functions
- Adhere to general departmental policies as outlined in this manual

The policies and procedures in this Handbook are intended for all students whose major advisor is a faculty member in the Department of Biological Sciences. Students in interdisciplinary programs should consult their program's graduate student handbook for the degree requirements and examination procedures of their respective programs.

Degrees

The Department offers programs leading to the Master of Science degree in Biological Sciences and the Doctor of Philosophy degree in Biological Sciences. A Master of Science may be earned in either of two options: the Thesis Option or the Comprehensive Study Option. The Department also participates in interdisciplinary programs in *Cellular and Molecular Biology; Discipline-Based Education Research; Environmental and Conservation Sciences;* and *Genomics, Phenomics, and Bioinformatics.* Students in any program can also participate in the *College Teaching Certificate,* which is coordinated by the NDSU Office of Teaching and Learning, as well as other certificate programs offered by other departments and colleges at NDSU

Graduate students should also adhere to Official Graduate School policies and requirements, which can be found here for both M.S. and Ph.D. degrees.

Tuition Waivers

Tuition for graduate-level courses is waived for all graduate students with an appointment as a research or teaching assistant, or who are on a fellowship, provided the student has not exceeded the credit cap set by the College of Arts and Sciences or the Graduate School. To receive a tuition waiver, you must be enrolled full time (6 credits for Fall and Spring, 2 for Summer). These credits can be either didactic credits, such as courses, or thesis/dissertation credits. Although tuition is waived, graduate students must pay semester fees associated with their registration. Tuition waivers are assigned during the contract process, which occurs each semester (Fall, Spring, and Summer).

Receiving a tuition waiver is dependent upon being a student in good standing with the university, being enrolled for 6 credits (Fall or Spring semesters, 2 credits for Summer), being up to date on all assigned Trainings (see Training section for details), being supported by a Teaching Assistantship, Research Assistantship, or Fellowship, and being below the credit cap on tuition waivers (see below).

Summer term waivers are available to students hired as a TA or RA either in the Spring preceding the summer semester, the Fall following it, or enrolled during the Summer term. Students are not required to register for summer credits and can be supported on an Assistantship or Fellowship while not enrolled in classes during Summer. Students should consult with their advisor about whether they should enroll in summer credits. This decision depends upon the specific situation of each student. For example, enrolling in summer thesis/dissertation credits may be required to earn the number of credits for the degree in the desired time frame. However, enrolling in summer credits also brings a student closer to the credit cap on tuition waivers. If enrolling in summer, you would need to enroll in at least 2 thesis/dissertation credits to receive a waiver. You can enroll in more credits if needed.

Credit cap on Tuition Waivers

For students in the Biological Sciences degree program completing a Master's degree, tuition is waived for up to 33 credits. This includes all credits whether considered part of the Master's degree or not. Students completing a Doctoral Degree will have tuition waived for up to 63 credits if accepted into the Doctoral program after having completed a master's degree or 96 credits if accepted into the Doctoral program after having completed only a bachelor's degree. This includes all credits whether considered part of the Doctoral Degree or not. Students enrolled in interdisciplinary graduate programs should consult the Graduate School website and their program's graduate student handbook for credit caps for those programs.

Students who reach the credit cap and need time to finish the master's thesis or doctoral dissertation will not receive a waiver. Instead, they can register for one credit of a fee-based BIOL 898 Continuing Enrollment course. There is no tuition for BIOL 898, but students will be required to pay a fee of $150.00 per credit. Master's students may enroll in one consecutive academic year of Continuing Enrollment. Doctoral students may enroll in two consecutive academic years of Continuing Enrollment. Students holding an F-1 or J-1 visa may not be eligible for the BIOL 898 credits. Contact your International Advisor for full details.

Students who experience extenuating circumstances during their graduate degree, such as a serious illness or a significant set-back beyond their control, can apply for an exemption to the credit cap. This request would be submitted to and evaluated by their College, which is Arts and Sciences for Biological Sciences students, and The Graduate School for interdisciplinary students.

Contracts

Contracts establish the roles and responsibilities for each semester.
Contracts provide information on the rate of pay, type of Assistantship, status of tuition waiver, required trainings, and provide a summary of duties for the time frame of the contract. Fall contracts begin on August 16 and run through the end of December. Spring contracts start on January 1 and extend to May 15. Summer contracts are May 16 to August 15. You will receive your contract through Docusign and can review it before signing. If you see something on your contract that you think may be in error, such as the type of Assistantship or the rate of pay, please reach out to your Major Advisor and the Department Chair. Please do not select the "decline to sign" option in Docusign. This option voids the entire contract and all previous signatures. If there is an error in the contract, it often can be corrected without starting over.

II. Assistantships

Teaching Assistantships

A graduate teaching assistant (TA) is expected to devote an average of 20 hours weekly to departmental duties to fulfill the work requirements of their assistantship. During the contract period, TAs are expected to be present and available to fulfill their duties. Fall semester TA contracts begin August 16 and run through December 31. Spring semester TA contracts begin January 1 and run through May 15. TAs are expected to participate in teaching duties throughout the contract period. TAs are not entitled to vacation until final grades are submitted. Short leaves for research-related travel (such as attending a conference or a short data collection trip) will be considered and must be approved in advance by the course's Faculty Lab Coordinator. Requests for leave time should be submitted to the Lab Coordinator at the beginning of the contract period (either August 16 or January 1).

Students are normally eligible for Teaching Assistantships throughout their tenure as graduate students. However, TA support is not guaranteed. Eligibility for a TA position is reviewed every semester. Appointments are dependent upon the availability of TA positions, whether the student is meeting expectations for degree completion, and whether they are meeting expectations for TA performance (see below). A student must maintain a GPA of 3.0 or above in graduate level courses to continue their teaching assistantship. TAs will be evaluated on their ability to meet expectations for their TA duties, and *failure to meet these expectations can result in dismissal from the TA position and/or ineligibility for future Teaching Assistantships.*

Teaching Assistantship Duties:

Below is a list of the standard duties for an in-person multi-section lab course. Those TAing for other course structures should consult their faculty supervisor and graduate contract for a list of duties. The duties listed below can also be modified by the faculty supervisor as part of the TA's contract:

- Teach lab sections assigned by the department according to teaching protocols developed by the Faculty Lab Coordinator
- Spend time adequately preparing to teach assigned lab material
- Grade and provide feedback on all assignments in a timely manner
- Assist in maintaining the Blackboard site for the course

- Assist in preparing lab materials and assignments as needed
- Assist in proctoring exams
- Attend mandatory weekly TA training meetings and participate in other training requirements as required by the Faculty Lab Coordinator
- Provide students opportunities to make-up labs as needed
- Assist with preparation of and set-up of materials for each week's lab. Assist with clean-up of lab rooms and disposal of materials at the end of each week
- Properly handle and dispose of all hazardous waste
- Other duties as assigned by the Faculty Lab Coordinator

TA Evaluation Policy:

Teaching Assistants who are responsible for teaching BIOL 100L, BIOL 150L, BIOL 151L, BIOL 220L and BIOL 221L lab sections will be evaluated each semester by the following process:

- During the 5th or 6th week of the semester, all lab students will complete an early semester formative assessment of the teaching performance. The Faculty Lab Coordinator will summarize the feedback received from the students and will use this feedback and their own observations to complete a formative teaching evaluation.
- The Faculty Lab coordinator will meet with each TA to review the evaluation and talk about strategies for improvement.
- At the end of the semester, the Faculty Lab Coordinator will use student evaluations, and their own observations, to complete a final teaching evaluation. They will meet with the TA to discuss their performance, and the teaching evaluation will be submitted as part of the graduate student's annual evaluation.
- TAs that receive poor final performance reviews will be required to meet with the Faculty Lab Coordinator, their Major Advisor, and the Department Chair to discuss an improvement plan. TAs that do not improve and receive a second poor final performance review will not be granted a future Teaching Assistant position in the Department of Biological Sciences.

Three strikes policy

The Department of Biological Sciences has a 3-strikes policy for unexcused absences. If a TA does not show up to teach their assigned lab section or to attend a mandatory TA meeting for an unexcused reason, the Faculty Lab Coordinator will notify the graduate student, the student's Major Advisor, and the Department Chair. This unexcused absence constitutes a strike.

If a TA absence is excused, the Teaching Assistant will not be given a strike for failing to attend the mandatory TA meeting or their assigned lab section, as long as they notify the Faculty Lab Coordinator prior to their absence (or as soon as feasibly possible). Excused absences could include illness, research-related travel approved by the Lab Coordinator, or other major life events that prevent their attendance.

For each suspected unexcused absence, the Faculty Lab Coordinator will confer with the Department Chair and the student's Major Advisor to verify that an unexcused absence is warranted. The Department Chair will keep track of the number of strikes that a student accrues during their time in our graduate program. If a graduate student receives three strikes during their time as a student in our department, they can be immediately removed from their teaching assignment at the discretion of the Faculty Lab Coordinator and the Department Chair and they will not be allowed to receive a Teaching Assistantship during their remaining time as a graduate student in the Department of Biological Sciences.

Falsification of Grades Policy

The Department of Biological Sciences considers the purposeful falsification of student grades by a Teaching Assistant, such as giving students a grade of 100% without reviewing the assignment, an egregious act of dishonesty. Falsifying student grades will be grounds for the Department Chair to immediately dismiss a Teaching Assistant from their position, and the offending graduate student will not be allowed to receive a Teaching Assistantship during their remaining time as a graduate student in the Department of Biological Sciences.

Research Assistantships

Research assistants (RAs) are half-time employees of the Department and are usually paid from research grant funds. Typically, research is conducted under the supervision of the principal investigator who generated the salary funds. Twenty hours per week is not sufficient time to complete one's research program; hence, it is necessary that RAs engage in research activities for additional hours beyond their half-time appointment. RAs are not automatically granted vacation or leave time. All absences must be cleared with the Major Advisor (or work supervisor if the RA is not funded by the Major Advisor).

III. Degree Timeline

The following timeline should be followed by graduate students in Biological Sciences degree programs. Students in interdisciplinary programs should consult the handbook for their program. However, all students who are employed (TA/RA) in Biological Sciences are required to submit Annual Progress Reports to the Department. Completion of the tasks by the suggested dates will be used as criteria for prioritizing departmental TA positions and will be assessed using the annual degree progress report. Early completion is acceptable and encouraged.

M.S. Degree

Annual tasks:

- Hold a meeting of the graduate supervisory committee to assess student progress
- Complete the Annual Progress Report and submit via Blackboard

Year 1 tasks:

- Form the graduate supervisory committee (end of 1st semester)
- Hold a first meeting of the graduate supervisory committee (end of 2nd semester)
- Submit a completed plan of study (end of 2nd semester)
- Submit a research proposal to the Department of Biological Sciences (end of 2nd or 3rd semester)

Years 2-3 task:

- Submission of thesis, oral defense and graduation

Ph.D. Degree

Annual tasks:

- Hold a meeting of the graduate supervisory committee to assess student progress
- Complete the Annual Progress Report and submit via Blackboard

Year 1 Tasks:

- Form the graduate supervisory committee (end of 1st or 2nd semester)
- Hold first meeting of the graduate supervisory committee (end of 2nd semester)
- Submit a completed plan of study (end of 2nd semester)

Years 2-3 tasks:

- Complete oral and written preliminary exams
- Submit a research proposal to the Department of Biological Sciences

Years 4-7 tasks:

- Complete dissertation and oral defense
- Submit dissertation and graduate

Annual Progress Reports:

All graduate students advised by faculty in the Department of Biological Sciences, regardless of their official degree program, are required to submit annual progress reports (example shown in Appendix 1). Reports are due on March 1 each year (unless notified otherwise). The data in these reports will be used to determine whether student expectations (see above) are being met and that adequate progress toward the degree is being made. The report template is available on Blackboard and should be electronically submitted through Blackboard.

IV. Roles and Responsibilities

Student Responsibility

The student, in consultation with the major advisor, is responsible for meeting all requirements and deadlines. Students making satisfactory progress generally complete a master's degree in two to three years and a doctorate in five to seven years. Coursework more than seven years old for a Master's or 10 years old for a doctoral degree cannot be used to satisfy degree requirements, per Graduate School policy. In cases where satisfactory progress is of concern, the Graduate Success Committee may either arrange meetings with the student and advisor to establish a schedule for completion of degree requirements or request a written report of the student's progress to be submitted by the student's advisor. Continued deficiency may result in dismissal. In cases where a particular requirement imposes undue hardship on a student, the student's graduate supervisory committee may petition the Department, via the Graduate Success Committee, for permission to waive that requirement.

Major Advisor

The faculty member who accepts a graduate student will serve as the major advisor. The major advisor should be active in the field of research specified by the applicant. The selection of an advisor must be mutually satisfactory to the student and the prospective advisor. The advisor-student relationship is unique and perhaps the most important one in the education and training of the graduate student. The mutual respect and intellectual growth derived from this relationship strengthens and promotes scientific achievement.

General student expectations of the major advisor include: 1) establishing and maintaining an effective line of communication (although the student must do the same), 2) providing guidance on the student's degree progress, and 3) guiding the student's research. Effective guidance of student research includes: 1) holding regular meetings with students, 2) providing timely and constructive feedback on student work, 3) facilitating a student's professional development, and 4) sharing relevant resources and funding opportunities.

Graduate Supervisory Committee

This policy is set by the Graduate School.

M.S. Degree: The graduate supervisory committee shall consist of at least three members for a master's degree. Specific requirements for committee membership can be found here: Master's Degree Policies.

Ph.D. Degree**:** The graduate supervisory committee shall consist of at least four members for a doctoral degree. At least two of the members of the committee must be faculty in the Department of Biological Sciences. Specific requirements for committee membership can be found here: Doctoral Degree Policies.

V. Course requirements and Plan of Study

Plan of Study

The plan of study should be submitted for approval to the graduate supervisory committee, the Department Chair, the current Graduate Coordinator, and the Dean of the Graduate School by the end of the second semester following enrollment for both M.S. and Ph.D. students. The formal plan of study should be completed during the initial meeting of the graduate supervisory committee, or shortly thereafter, as a direct outcome of that meeting. The approved plan of study becomes part of the contract of the student with the Department and University for completion of their graduate program of study. Changes in the plan of study, which are made using the Change to Plan of Study Form, must be approved by the same individuals who approved the original Plan of Study (see above). The official M.S. and Ph.D. plan of study forms, including the Change to Plan of Study Form are available at the Graduate School website

Coursework

The student, in conjunction with their graduate supervisory committee, will design a plan of study appropriate to their needs. The student must complete minimum course credit requirements established by the Department of Biological Sciences (below) and the Graduate School for the M.S. and Ph.D. degrees. Graduate School requirements are available in the Graduate College Policies. The degree requirements below are for degrees in Biological Sciences. Interdisciplinary degree students should consult their program's handbook.

Biological Sciences M.S. Degree Course Requirements (Minimum of 30 credit hours total)

- BIOL 790 – Graduate Seminar (1 semester) - 1 credit
- BIOL 884 – Biological Research Principles - 3 credits
- BIOL 842 – Quantitative Biology or equivalent as approved by graduate supervisory committee - 3 credts
- BIOL 798 – Master's Thesis – 6-10 credits total for degree
- Biological Content Courses to be approved by the graduate supervisory committee

From the Graduate Bulletin, "For the Thesis-Based Master's, of the required minimum 30 graduate credits, at least 16 credits must be approved for graduate credit numbered from 601-689, 691; 700-789, 791; 800-889 and 891 while the research credits (798) must not be fewer than six nor more than 10 credits. Once these minimum requirements have been met, any other graduate courses can be used to satisfy the remaining Plan of Study requirements."

Biological Sciences Ph.D. Degree (Minimum of 90 credit hours total)

- BIOL 790 – Graduate Seminar (1 semester) - 1 credit
- BIOL 884 – Biological Research Principles - 3 credits
- BIOL 842 – Quantitative Biology or equivalent as approved by graduate supervisory committee - 3 credits
- BIOL 899 – Doctoral Dissertation – up to 63 credits total
- Biological Content Courses to be approved by the graduate supervisory committee

From the Graduate Bulletin, "The total credits will be determined by each program but must not be fewer than 90 semester graduate credits, of which no fewer than 27 credits must be in courses approved for graduate credit numbered 601-689, 691; 700-789, 791; 800-889 and 891 (referred to as didactic courses). Of these 27 credits, no fewer than 15 credits must be in 700 or 800-level course work (700-789, 791, 800-889 and 891). A student matriculating with a master's degree, including a degree earned at an international institution, must earn no fewer than 60 graduate credits at NDSU. Of these credits, no fewer than 15 credits must be NDSU courses at the 700 or 800 level (700- 789, 791, 800-889, and 891)."

Credit Load

Graduate students on departmental financial support are required to register for a minimum of 6 credits per fall and spring semesters, unless they have completed their plan of study at which time they can enroll in 1 continuing enrollment credit. Note that this does not apply to students on international visas, who must enroll in six credits every semester. Formal coursework, thesis credits, and thesis/dissertation credits count toward these totals. See the academic assistant for details concerning registration for thesis and dissertation credits (Plan of study forms).

Per NDSU Graduate School policy, graduate students are required to maintain continuous enrollment during Fall and Spring semesters. Summer enrollment is not required unless the student is beginning their degree or completing degree requirements (e.g., preliminary exams, final defense or graduation) during the Summer term. Details about this policy are here.

Quality of Work

To remain in graduate school, a student must maintain a minimum cumulative grade point average of 3.0. Seminars, research credit, and special topics courses are not normally included in the grade point average. Degree progress will be assessed with the annual progress reports (Appendix 1). In cases where satisfactory progress is of concern, the Graduate Success Committee may either arrange meetings with the student and major advisor to establish a schedule for completion of degree requirements or request a written report of the student's progress to be submitted by the student's advisor. Continued deficiency may result in dismissal.

Degree Fulfillment and Leaves of Absence

It is expected that once students begin their graduate program in the Department, they will not leave until all requirements are completed. Even students who have completed all portions of their plan of study and research, except the disquisition, must maintain continuous enrollment until degree requirements are completed.

Students who must interrupt their program may request a leave of absence from the Graduate School which will exempt them from continuous enrollment. A leave of absence must be approved by the major advisor, the Department Chair and the Graduate Dean. Prior to returning to the University, a student on leave must notify the Graduate School, which will restore the student's classification to active status. Further details are here.

VI. Milestones for degree completion

The following milestones are required for Biological Sciences degree students. Interdisciplinary degree students should consult their program's handbook.

Research Proposals

M.S. Degree

At the end of their second or third semester, the student should submit a written proposal of their master's research to the graduate supervisory committee, providing the proposal at least one week in advance of the planned committee meeting. This proposal shall be of sufficient detail so that someone not familiar with the project can understand what the project is about, including why and how it is being conducted. The research project should be planned and the pertinent literature reviewed and understood. Students shall discuss what aspects of the project are original research. The major components of the proposal are identified below – students should consult with their advisor on the appropriate length of each section and overall formatting of the proposal document.

The proposal should include the following components:

- Title Page
- Abstract (not more than 1 page)
- Introduction and Background (literature review)
- Objectives
- Proposed Methods and Analyses
- Anticipated Results
- Significance of Research Plan
- Timetable (not more than 1 page)
- Literature cited

Once the student has made the revisions to the proposal recommended by their graduate supervisory committee, a PDF copy of the proposal should be submitted to the Department's Academic Assistant and maintained by the Department.

Ph.D. Degree

In the second year of their degree, the student should submit a written proposal of their doctoral research to the graduate supervisory committee, providing the proposal at least one week in advance of a planned committee meeting. This proposal shall be of sufficient detail so that someone not familiar with the project can understand what the project is about, including why and how it is being conducted. The research program should be planned and the pertinent literature reviewed and understood. Students shall discuss which aspects of the project will be original research.

The major components of the proposal are identified below – students should consult with their advisor on the appropriate length of each section and overall formatting of the proposal document.

The proposal should include the following components:

- Title Page
- Abstract (not more than 1 page)
- Introduction and Background (literature review)
- Objectives
- Proposed Methods and Analyses
- Anticipated Results
- Significance of Research Plan
- Timetable (not more than 1 page)
- Literature cited

Once the student has made the revisions to the proposal recommended by their graduate supervisory committee, a PDF copy of the proposal should be submitted to the Department's Academic Assistant and maintained by the Department.

Preliminary and Final Examinations

A Graduate School Form (Notification of Scheduled Examination) must be filed with the Graduate School at least two weeks prior to the scheduled date of the examination. This form must be signed by the major advisor, Department chair, current Graduate Program coordinator or Program Director, and Graduate dean. The chair, coordinator or director may request to read the disquisition prior to signing the forms.

M.S. Degree (Final Examination)

The student will give a departmental presentation of their research during their final semester. A final oral examination will also be administered to each master's degree candidate. This examination will be either immediately following the departmental presentation or on a subsequent day. The examining body will consist of the student's graduate supervisory committee. The examination will test general knowledge in biology, coursework, and the student's research area. The student passes the exam if no more than one member of the graduate supervisory committee votes to fail.

Ph.D. Degree (Preliminary and Final Examinations)

Preliminary Examination

The preliminary examination will follow the completion of at least 15 credits of didactic coursework (either in residence at NDSU or transferred credits). This examination consists of a written portion (see below) followed within one month by an oral portion. Both the written and the oral portions should be successfully completed by the end of the student's second or third year, at which time the student is formally advanced to candidacy for the doctoral degree. The content of the exam will be determined by the graduate committee, incorporating questions that facilitate both broad-based and in-depth knowledge acquisition. The forms for scheduling the preliminary exam and reporting the results of the exam can be found here.

The written portion of the preliminary exam will focus on topics related to the student's area of study, with the objective of broadening the student's general knowledge of related fields and placing their research within the context of their broader discipline. The format and time frame of the exam should be decided by the graduate supervisory committee. The exam will be prepared and administered by the graduate supervisory committee. Committee members who submitted questions will return their evaluations of the written responses to the Chair of the graduate supervisory committee within two weeks of the examination. Results will be presented on a pass/fail basis. A "pass" is given when a student receives more "passes" than "fails." Students may retake failed sections once within 12 months of the exam. Graduate School policies on preliminary and oral examinations.

The oral portion of the preliminary exam will address the research area and the student's coursework, plus any topics from the written section that were not appropriately addressed by the student. Following the exam, the graduate supervisory committee will review the student's progress (including such areas as GPA, completion of coursework on the plan of study, research, and seminars). The student passes the oral portion if no more than one member of the graduate supervisory committee votes to fail. One of the following recommendations will be communicated to the student, the Department Chair and the Graduate Dean:

1. that the student be advanced to candidacy for the Ph.D. degree;
2. that, if the student failed the exam, they be allowed to repeat the exam; or
3. that the student be terminated from the Graduate Program in Biological Sciences.

Students may appeal unfavorable decisions to the entire Biological Sciences' faculty through the Graduate Success Committee. If not successful, the student may then appeal to the Dean of the Graduate School.

Final Examination

The candidate will present a public seminar covering the dissertation research during their final semester. The seminar must be presented before the final examination can be administered, but does not need to be immediately before the exam.

The final oral examination, which is usually conducted immediately after the public seminar, will be concerned primarily with the dissertation, but questions may cover material from coursework, especially those courses fundamental to the dissertation. The candidate will be expected to demonstrate a thorough understanding of all aspects of their dissertation including literature survey, experimental design and rationale, statistical analyses, and significance of the results. The form for reporting the results of the final exam can be found here.

Disquisitions (Thesis or Dissertation)

A thesis is required for the M.S. degree in the Thesis Option, and a research paper is required for the Comprehensive Study Option. A dissertation is required for the Ph.D. degree. The NDSU Graduate Bulletin contains additional details and requirements for these options and degrees. Please see the Graduate School website.

Information is available from the Graduate School on how to prepare theses, dissertations, and papers. Students need to adhere to the policies concerning disquisitions as stated in the requirements. Every semester, there are disquisition formatting workshops offered by the university.

Students will submit copies of their disquisition (thesis or dissertation) in a near final form to the members of their graduate supervisory committee at least two weeks before the scheduled date of the oral exam. This deadline should be regarded as a minimum period (one month is preferred), with more time being desirable to allow the committee ample time to evaluate the disquisition.

Students are encouraged to publish the results of research and to give papers at professional meetings. The graduate supervisory committee may require the student to have their results in a form suitable for publication as well as filing a disquisition. Publication of a disquisition or part(s) of a disquisition should include a statement identifying the work as part of a thesis or dissertation submitted to the Graduate School of North Dakota State University.

VII. Conflict Resolution

Problems, misunderstandings, and frustrations may arise in the workplace. It is the Department of Biological Science's intent to be responsive to its graduate students and their concerns. A graduate student who is confronted with a problem may use this as a guideline for resolving or clarifying concerns.

Students should consult the NDSU policy manual for procedures to resolve conflicts relating to the following:

A. Graduate College Appeals
B. Academic misconduct such as breaches of academic integrity in research and publication
C. Employment specific issues
D. Cases that arise under the Student Code of Conduct
E. Cases involving alleged discrimination or sexual harassment

Avenues for Informal Conflict Resolution and Complaint Process

The Department of Biological Sciences strongly encourages all students who have a dispute or conflict to use all appropriate avenues for informal resolution before initiating formal grievance procedures. Advice about informal resolutions to situations should be sought first from your faculty supervisor. If the conflict is still unresolved or if the conflict involves your faculty supervisor, contact the Department Chair. The NDSU ombudsperson (Kristine Paranica) can meet with you to discuss the situation and the options for resolving the conflict.

At any time, students are encouraged to seek resolution or advice from the specific resources listed below.

Specific resources

A. NDSU Counseling Center

"The NDSU Counseling Center provides a confidential setting in which students may explore concerns of a personal, academic, or career-related nature; makes referrals; and serves as consultants for faculty and staff. Students in counseling can explore a variety of concerns which may prevent them from functioning at their optimum levels".

B. NDSU Family Therapy Center

"The Family Therapy Center (FTC) offers affordable, responsive therapy services to individuals, couples, families, and children in the FM area. Therapists at the FTC are advanced clinical interns from the NDSU Couple and Family Therapy (CFT) Program." NDSU students receive services for free.

C. NDSU Ombudsperson

The Ombudsperson provides consultation, coaching, and mediation to faculty and graduate research and teaching assistants. Her expertise includes conflict management, mediation skills, emotional and social intelligence, civility, bullying, change management, communication, listening, negotiation, diversity, dealing with difficult people, effective meetings, stress management, leadership, effective supervision, performance management, nonviolent communication, and difficult conversations. Meetings with the NDSU Ombuds are confidential and will not be reported to anyone else at the University.

VIII. Miscellaneous Information

Training/Certification

The following trainings are mandatory for all graduate students in the Department of Biological Sciences: Baseline Safety, Laboratory Safety Course Modules 1, 3-6 with Module 2 initial in-person Waste Handling and thereafter an online refresher at the start of each semester; Sexual Harassment/Title IX training are mandatory for all students. FERPA training is required for all Teaching Assistants. IACUC (Institutional Animal Care and Use Care), IBC (Institutional Biosafety Committee), IRB (Institutional Review Board), Occupational Health and Safety (OHS), or other types of training may be required depending on your lab. Almost all Trainings are assigned and completed through Vector Solutions. All trainings must be completed for your tuition waiver to be processed. If you are unsure if you have completed your training, or unsure which trainings you need to complete, please contact the Academic Assistant.

Scholarships

The Department has scholarships for graduate students. Here are descriptions of the scholarships that students can apply for through the NDSU Academic Works website. Most scholarships have a March 1st deadline. The College of Graduate and Interdisciplinary Studies (CGIS) has compiled a list of fellowship opportunities that are open to students in a variety of disciplines.

60 Day Maximum on Submission of Reimbursement for ALL Purchases (Travel, Equipment, etc)

As of 2025, any purchases made by faculty or students must be submitted for reimbursement within 60 days of the purchase. Travel expenses paid before the travel occurs, such as airline tickets or registration fees to attend a conference, must be submitted for reimbursement within 60 days of purchase - do not wait to request reimbursement until after the travel occurs. The ideal time window is to submit all reimbursements within 30 days of purchase. If you do not submit reimbursements within 60 days of purchase, reimbursement can still occur, but the reimbursed funds will be categorized as taxable income that you will be responsible for reporting on your state and federal tax forms.

All receipts must be turned in to the CAS Business Center account technician (you can use the website to find the technician assigned to Biological Sciences. Receipts and other documents relevant to a reimbursement must be submitted to the CAS Business Center office located in Minard 232A6 or via scans of receipts and relevant documents submitted via email to the account technician assigned to Biological Sciences. In the event that you use a personal credit card, be sure that you get an additional, itemized receipt. Reimbursements cannot be made from the credit card receipt itself.

Making Purchases

Obtain approval from your advisor or work supervisor before purchasing supplies, materials, and/or equipment with department or grant funds. Be certain that you understand policies, rules, and regulations concerning purchasing. Please do not submit reimbursement requests for less than $10.

Travel

An Out-of-State Travel Authorization Form must be filled out at least 10 days in advance for **out-of-state travel**. On the initial Docusign page, information must be entered for the following people: 1) You, 2) your supervisor, who is the Department Chair (not your major advisor), and 3) the Business Coordinator. **Do not fill in the remaining fields for Department Chair, Vice President/Dean/Director or Provost/Vice President unless you are travelling internationally or for more than 30 days (domestically or internationally).** On the main page, note that our Department Number is 2506 and that for Supervisor Email you should again list the Department Chair.

No form is required for in-state travel; however, you should discuss your plans with your advisor or the department chair. Reimbursement for travel expenses must be approved by the graduate advisor or work supervisor. A CAS Travel Expense Reimbursement CAS Travel Expense Reimbursement Request Form must be filled out for reimbursement of travel expenditures. See section above about the timing of submitting reimbursement requests. Meals are covered under a per diem allowance, assuming funds are available. Save all itemized non-meal receipts, especially those for lodging. For hotels, make sure to obtain a receipt indicating payment in full (”"zero balance”).

Postage/Mail

Mail for official business can be left in the department office and postage will be paid by the department. Outgoing mail and campus mail is placed on the counter next to the mailboxes in the main office. All labs have a lab mailbox, where your on-campus mail will be delivered. It is good practice for someone in your lab to check your mailbox at least once a week. Shipping of personal items to the department/on campus is not allowed under university policy.

Photocopier

Graduate students have access to the building's photocopy machine through their student IDs. Your advisor is responsible for all costs incurred, so be sure to clear copying with them. Copying for personal use is not allowed.

Library

The university libraries have collections of books, periodicals, reference materials and maps that are available for student use. The library also has invested in a number of online journals. Journal articles not accessible can be requested through interlibrary loan.

Security/Keys

Keys and card access are obtained from the Biological Sciences Department office. All students will need keys to their assigned office and their lab. In addition, students need card access to the outside door. Additional access requires authorization by the individuals responsible for that area.

Biological Sciences Key Control Policies

- Students accept financial responsibility for their keys and will be charged a fee of $20 per key to replace lost or unreturned keys.
- If keys are not returned, a hold will be placed on the student's transcripts until keys are returned or payment is received for lost keys.
- New key(s) are picked up in Stevens 201.
- When the student is finished at NDSU, they must return their keys to Stevens 201 within a week of graduation. At that time, their deposit will be returned, if one was paid.

All graduate students have the responsibility of maintaining proper security measures. Be particularly security conscious of areas containing valuable equipment or dangerous materials. Any theft or vandalism should be reported immediately to the major advisor**,** Department chair**,** or campus police.

Computers (Drives and E-mail accounts)

Computers are available for student use at clusters on campus. Check the Information Technology Services (ITS) for details about the computing services available at NDSU. Students will have access to NDSU OneDrive and GoogleDrive during their degree program. Upon graduation, student will maintain access for up to one year at which time NDSU will delete the account and all associated information and data. This also applies to the student's NDSU email account. Please communicate with your major advisor about long-term storage options for your research-related files.

Multimedia equipment can be reserved (online reservations) from ITS. In addition to the NDSU clusters, computers are often made available by departmental faculty for students working in their laboratories.

Safety

All graduate students are expected to adhere to campus rules and regulations concerning safety. Attendance at required safety and risk management seminars and presentations is mandatory. If you have any questions concerning safety or NDSU's policies on safety, consult with your major advisor or the Department chair.

In the event of a fire or fire drill, go to your designated assembly point. For Stevens Hall residents, our predetermined designated assembly point is across the street (Bolley Drive) on the east side of Stevens Hall. Each person is required to exit immediately; you must be at least 50 feet from the building. Close all lab doors as you depart.

Student Health Services/Insurance

Clinical services are available to registered students at Wellness Center on campus. An NDSU health insurance plan is available to students, their spouses, and their children. Application forms are available at the Wellness Center.

Vehicles

Vehicles are available from NDSU motor pool for NDSU-related business. Individuals are expected to be in compliance with all laws governing the operation of motor vehicles. Vehicles are for official use only. Only persons officially working for NDSU or current students may be transported. Drivers must have a valid state driver's license to operate university, state, or federal vehicles.

Before driving a vehicle from NDSU motorpool, new drivers will need to complete the State Fleet Drivers Fueling ID Request. This ensures that motorpool has the proper information on file for the vehicle fuel card.

When making a reservation with Motorpool, first contact motorpool directly at 701-231-9619 to get a reservation number. Then, either you or the main office will need to complete the Motorpool Reservation Form. Both steps must be completed before you travel.

Treat the vehicles with care and report problems to your advisor and to the Facilities Management. Each vehicle must be equipped with a first-aid kit, flashlight, fire extinguisher, spare tire, and jack. During winter use, the vehicle must be equipped with a winter survival kit. The driver is responsible for checking that these items are present. During travel, the driver and all passengers are required to use seat belts. Lock vehicles when not in use. Prior to departing, drivers must apply for a fueling card (see main office for assistance). Whenever possible, use the ND Department of Transportation fueling sites. Drivers are responsible for the security of credit cards and should report any losses immediately.

Accidents or damages to a vehicle must be reported immediately to a law enforcement officer, to Facilities Management, and to your major advisor. Do not accept responsibility for an accident; provide only factual information. It is unlawful to consume alcoholic beverages while in control of a vehicle or to drive under the influence of alcohol and certain other substances. It is also illegal to transport or possess alcoholic beverages and/or illegal drugs in a university, state, or federal vehicle. Individuals may be personally liable if they have an accident as a result of a violation of the rules.

When you return from a trip, fill the tank with gas. Remove personal items and trash and wash as necessary. An outdoor vacuum is available at Facilities Management for cleaning vehicles. Record mileage, return vehicle to the designated lot, and return keys and packets to Facilities Management.

Boats, canoes, and other watercraft
All laws governing use of watercraft must be obeyed. Personal floatation devices (life jackets) must be worn at all times while on the water.

Child Care
Child care is available on campus at the Wellness Center.

Graduate Student Housing - One-, two- or three-bedroom apartments are available to graduate students in Apartment 1701, Bison Court, Niskanen, or University Village. For information, contact Residence.

Credit Union - Graduate Students may join the campus credit union (Northland Educators Federal Credit Union).

Graduate Faculty and Research Interests

Laura Aldrich-Wolfe, Ph.D., Cornell University, 2006
Associate Professor
Community ecology, mycorrhizas, plant-fungal interactions. The roles of mycorrhizas in natural and managed ecosystems. Drivers and functions of community composition in the rhizosphere. Maintenance and restoration of diversity in tropical forests and temperate grasslands.

Julia H. Bowsher, Ph.D., Duke University, 2007
Professor and Chair
Evolutionary Developmental Biology. How stress during development affects adult performance. Work spans the fields of physiology, evolution, and development and uses molecular and bioinformatic techniques. Study organisms are solitary bees and honey bees.

Ned Dochtermann, Ph.D., University of Nevada, Reno, 2009
Professor
Behavioral and Evolutionary Ecology. Ecological and evolutionary maintenance and consequences of phenotypic variation, in particular behavioral variation and behavioral correlations. Research examines, for example, how variation impacts evolutionary outcomes available to populations and how variation influences population dynamics.

Erin H. Gillam, Ph.D., University of Tennessee, 2007
Professor
Behavioral Ecology of Mammals, with a focus on bats. Understanding how ecological, evolutionary, and behavioral factors influence the structure of acoustic communication signals. Behavioral context and function of social calls in a variety of species. Ecology of bats and other mammals in the Great Plains.

Kendra J. Greenlee, Ph.D., Arizona State University, 2004
Professor
Insect Physiology and Immunology. Research interests include body size variation and respiratory system physiology in insects, with an emphasis on effects of hypoxia on respiratory functions and molting. Insect immunity and the response to bacterial and parasite infections.

Tim Greives, Ph.D., Indiana University, 2009
Professor
Physiological Ecology, Seasonality, Biological Rhythms. Physiological and evolutionary mechanisms regulating life-history transitions in seasonal environments. Trade-offs between physiological systems, particularly between energetic investment into reproduction and immune function (as a proxy for survival). Identification of selective forces acting to favor precise timing mechanisms, and fitness value of functional endogenous clocks.

Britt Heidinger, Ph.D., Indiana University, 2007
Professor
Physiological Ecology, Aging, Stress Responsiveness. Current research focuses on physiological mechanisms of aging (stress responsiveness and telomere dynamics), and the influence of exposure to environmental stressors on aging.

Jiha Kim, Ph.D., University of Georgia, 2006
Associate Professor
Cancer Biology Understanding cross communications between cancer cells and tumor microenvironment with an emphasis on vascular and immune components. Current research is focused on identifying a mechanism to reprogram the perivascular signature to promote vascular functionality and enhance drug delivery efficacy.

Jennifer L. Momsen, Ph.D., Rutgers University, 2007
Professor
Biology Education. Effective pedagogy for and challenges to undergraduate learning of complex biological systems; infusing introductory biology curriculum with quantitative biology; barriers and effective approaches to instructional change in undergraduate biology.

Lisa M. Montplaisir, Ph.D., University of Arizona, 2003
Professor
Biology Education, Especially in Post-secondary Science Classrooms. Research focus is on student learning and understanding in undergraduate science classrooms. Other interests are knowledge retention and curriculum development at the undergraduate level and teacher retention/recruitment and curriculum development at the secondary level.

Marinus L. Otte, Ph.D., Vrijie Universitiet of Amsterdam, 1991
Professor
Wetland Ecology, Biogeochemistry, Ecophysiology, and Ecotoxicology. Responses of wetland plants to changes in their environment. 'Extreme' wetlands. Elemental uptake by wetland plants associated with hot springs. Metal tolerance in wetland plants. Natural and constructed wetlands for improvement of water quality. Wetlands for phytoremediation and phytostabilization of mine wastes.

Katie M. Reindl, Ph.D., North Dakota State University, 2006
Professor
Cancer Pharmacology. Mechanisms of action of anticancer agents and pharmacological targets for cancer treatment.

Sarah A. Signor, Ph.D., University of California, Davis, 2013
Assistant Professor
Insect Evolutionary Genomics. Addresses fundamental questions in evolutionary biology using *Drosophila* as a model organism. Integrates diverse methods to understand how gene expression evolves within a network context, how gene expression is shaped by heterogeneous environments, and how organisms evolve in response to increasingly human modified landscapes

Tara Slominski, Ph.D., North Dakota State University, 2020
Assistant Professor of Practice
Biology Education. Understanding challenges to undergraduate learning of physiology. Examining cross-cutting STEM concepts and instruction, special focus on implementing physics concepts in physiological contexts. Characterizing and supporting the working, rural, and nontraditional student experience.

Matthew T. Smith, Ph.D., University of Arkansas, 2012
Professor of Practice
Physiological Ecology and Ecomorphology of Reptiles and Amphibians. Patterns of phenotypic variation in natural populations, how such patterns can be used to infer the evolutionary history of the organisms, and inform management decisions based on this knowledge; understanding adaptations that permit organisms to subsist within a constantly changing environment.

Craig A. Stockwell, Ph.D., University of Nevada, Reno, 1995
Professor
Evolutionary Ecology of Native and Rare Fishes. Contemporary evolution of populations in response to novel environments (salinity & parasite communities). Establishment of new populations and the implications for host-parasite associations. Conservation biology, invasion biology, and molecular ecology.

Steven E. Travers, Ph.D., University of California, Santa Barbara, 1998
Associate Professor
Plant Evolutionary Ecology. Focuses on understanding the ecology and evolution of natural plant populations. In particular, interested in the evolution of plant reproductive traits, the role of local adaptation and the ecological genomics and population genetics of plant responses to environmental change.

Important Contact Information

Person/Organization	Contact Information
Emergency Numbers	
Emergency	911
Campus Police (non-emergency)	1-8998
Jeff Kittilson (Research Specialist)	jeffrey.kittilson@ndsu.edu
Matthew Dryburgh (Academic Assistant)	matthew.dryburgh@ndsu.edu/1-7087
Kristine Paranica (Ombudsperson)	Kristine.Paranica@ndsu.edu/1-5114
Julia Bowsher (Professor and Department Chair)	Julia.Bowsher@ndsu.edu/1-7072
Lab Coordinators	
Kimberly Booth (Associate PoP)	kimberly.booth@ndsu.edu
Angie Hodgson (PoP)	angela.hodgson@ndsu.edu
Tara Slominski (Assistant PoP)	tara.slominski@ndsu.edu
Matthew Smith (PoP)	matthew.thomas.smith@ndsu.edu
Dawn Ihle (Hill Lab Coordinator)	dawn.ihle@ndsu.edu
College Business Office	
CAS Business Office	https://www.ndsu.edu/accounting/business_centers/college_of_arts_sciences

APPENDIX: ANNUAL DEGREE PROGRESS REPORT TEMPLATE

Department of Biological Sciences
Annual Report of Degree Progress for Calendar Year 2026

STUDENT INFORMATION

Name:

Advisor(s):

Graduate program: *for example, PhD in Biological Sciences*

Start date of current graduate program:

Is this the same program you initially started at NDSU?

If not, what program did you begin in, and when did you begin that program?

For this past year, indicate type of support you received (TA, RA, none) for each semester:

Spring	Summer	Fall

In the previous calendar year, did you take on a TA overload?

If so, how many semesters and how many extra sections?

Are you participating in the College Teaching Certification program?

If so, how and when do you expect to complete the teaching requirement for this program?

Graduate GPA:

DEGREE PROGRESS

Supervisory committee members & Department affiliations:

Date of most recent annual committee meeting:

Date (tentative) of next committee meeting:

Is your Plan of Study submitted and approved? *Yes or No.*

If no, please indicate when you expect to submit that paperwork:

Total number of credit hours completed since start date:

Didactic credits completed:

Thesis or dissertation credits completed:

Preliminary exams (PhD students only)

Date of Written Exam: *completed or scheduled?*

Date of Oral Exam: *completed or scheduled?*

Research Proposal

Date of completion or date scheduled:

Has your research proposal been approved by the department chair or program director?

Is your research proposal on file with the department or program?

Research Progress and Goals

Replace this text with a short narrative of the research progress you have made over the past year and indicate your research goals for the coming year.

Thesis/Dissertation

Replace this text with a short narrative of the progress towards completing your thesis or dissertation (e.g., how many chapters are completed) and a target date for when you will defend.

PROFESSIONAL DEVELOPMENT

Trainings *Please provide the date and mode (in-person or online) of most recent training for each, as applicable:*

Equal Opportunity/Title IX:
FERPA:
Baseline safety:
Lab safety:
Waste Handling:
IACUC/IRB:
Theft, fraud, abuse, waste, code of conduct:
Responsible Conduct of Research:

Have you completed an Individual Development Plan? If so, which one and when? *Different options are available online (one well-known one is myidp.sciencecareers.org)*

Did you discuss with your advisor? If so, how and when?

Peer-reviewed Manuscripts *Replace this text with a list of all manuscripts in press, in review, or published since your last report. Provide full reference, if available, and DOI*

Grant applications *Include a list of all grant applications you submitted since your last report. Include the title, funding source, status (pending, declined or funded), and amount. For grant proposals for which you were a contributor, briefly describe the nature of your contribution.*

Abstracts/presentations (please indicate whether local, regional, state, national or international) • *Include a list of all presentations since your last report (type of presentation, authors, title, conference, location, date)*

Courses taught as instructor or TA *List courses you were involved in for spring, summer & fall*

Innovative teaching activity (example) *Short narrative of how you have improved your teaching*

Professional development training *List any professional development workshops or seminars or courses you have taken (e.g., teaching college science certificate, writing workshops or grant writing workshops)*

Outreach activities *List any outreach activities you participated in this past year (e.g., Darwin Day)*

Honors or Awards *List any awards or honors you received or were nominated for this past year.*

The Graduate Success Committee and your faculty advisor, <Insert Name> will evaluate this report. We will send you a memo prior to the end of the semester detailing our evaluation of your progress.