



GRADUATE EDUCATION HANDBOOK

AY26-27

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INTRODUCTION

This handbook contains requirements specific to the Ph.D. and M.S. degrees in Biological Sciences as required by the Division of Biological Sciences (DBS), the University, and the Graduate School. Please see the following sources for additional information:

- [Master's Requirements](#) (University)
- [Doctoral Requirements](#) (University)
- [Master's Degree](#) (Graduate School)
- [Doctoral Degree](#) (Graduate School)
- [M.S. in Biological Sciences](#) (DBS)
- [Ph.D. in Biological Sciences](#) (DBS)
- [Division of Biological Sciences Graduate Program](#)

Information in this handbook should be considered supplementary to existing University policies and is subject to supersession at any time by any applicable rules, regulations, and policies outlined by the University System, MU Graduate School, and the Division of Biological Sciences, where and/or when applicable. Please notify the DBS Director of Graduate Studies (DGS) if you believe this document contains any errors or inaccuracies.

CONTACTS

ADMINISTRATIVE

- **Dr. David Schulz**, DBS Director, 105 Tucker Hall, SchulzD@missouri.edu
- **Dr. Manuel Leal**, Director of Graduate Studies, 209 Tucker Hall, LealM@missouri.edu
- **Dr. Bethany Stone**, Associate Director of Undergraduate Studies, StoneB@missouri.edu

GRADUATE EDUCATION COMMITTEE (GEC) - AY2025/2026

- **Dr. Caroline Grunenwald**, 305 Tucker Hall, CMGrunenwald@missouri.edu
- **Dr. Kevin Middleton**, 224 Tucker Hall, middletonk@missouri.edu
- **Dr. Joe Santin**, 102 Lefevre Hall, santinj@missouri.edu

DBS STAFF SUPPORT

- **Melody Kroll**, 218 Tucker Hall, krollmm@missouri.edu
--Graduate studies support staff, graduate forms, graduate course permission numbers, Graduate Seminar (BIO_SC 8187), recruitment, annual evaluations
- **Rebecca Ballew**, 105 Tucker Hall, ballewr@missouri.edu
--DBS Seminar (BIO_SC 8087), building/lab access & issues, conference room reservations, mail/packages
- **Nikola Velickovic**, 105 Tucker Hall, nvnyb@missouri.edu
--DBS Business Manager; fiscal-related questions; appointment and payroll-related issues
- **Jared Seals** and **Nick Valentine**, 3 Tucker Hall, bioit@missouri.edu
--IT issues (except personal computers or devices)
- **Steve Heinrich**, 17 Tucker Hall, heinrichs@missouri.edu
--issues with shared research equipment

GRADUATE SCHOOL STAFF SUPPORT

- **Ryan Adkins**, adkinsjr@missouri.edu
-- Academic Advisor for Doctoral Students
- **Shelly Botts**, bottss@missouri.edu
-- Academic Advisor for Master's and Certificate Students

- **Dr. Liz Bent**, benteo@missouri.edu
-- External Fellowship Support, Grant Development
- **Karen Gruen**, gruenk@missouri.edu
-- Questions about tuition waivers and medical insurance
- **Dr. Laura Roesch** and **Audra Jenkins**, 201 Student Success Center
-- Graduate Career Coaches

DIVERSITY STATEMENT

DBS recognizes that an inclusive and diverse environment is essential for scientific excellence and innovation in our research, teaching, and service missions. At its core, scientific innovation flourishes from the fusion of different perspectives and experiences, which are inherently linked to the composition of the academic community. Therefore, we are committed to building a community where all participants feel equally welcome and encouraged to contribute. Our commitment requires that all faculty, staff, and students of the Division actively promote an inclusive environment in which all members of the DBS community and visitors feel welcome. We will strive to recognize our biases and work together to actively minimize their influence on our interactions, opinions, and decisions. This commitment is reflected in our goal of increasing the participation of members of historically and currently excluded groups in our Division at all levels.

We are committed to building an inclusive, unbiased, and prejudice-free environment that values, respects, and welcomes all individuals with their diverse backgrounds, experiences, and perspectives* and will support all in their academic and professional development.

We are committed to providing a community in which all our members (i.e., faculty, staff, and students) are expected interact with all faculty, staff, students, and the public respectfully; and recognize the importance of having different perspectives on campus and beyond, which is fostered by having a diverse population of students, faculty, and staff.

We are committed to further increasing the diversity of our faculty, staff, and students by recruiting and retaining members of historically and currently excluded groups, particularly those underrepresented in the Division and the biological sciences nationwide.

We embrace evidence that an inclusive environment and a diverse community stimulate scientific innovation and educational excellence. We aspire to become a model for the appreciation, enhancement, and implementation of inclusion and diversity at MU and within the broader academic community. Depending on our roles in the Division, we have different avenues and responsibilities to foster inclusiveness.

As staff, we are committed to:

- developing practices and policies that foster inclusiveness and diverse experiences, promoting equal participation of all groups
- appreciating diverse experiences as opportunities for personal and professional growth
- welcoming opportunities for professional development, including those addressing inclusiveness and diversity in our workforce and society

As students, we are committed to:

- being respectful of others in the community, such as peers, faculty, and staff, regardless of their backgrounds
- appreciating the opportunity to interact with people of different backgrounds
- utilizing diverse experiences as opportunities for personal and intellectual growth
- being receptive to new ideas and opinions

As faculty, we are committed to:

- being role models for promoting inclusiveness and diversity
- being respectful in our interactions with all division members, the university community, and the public.
- developing teaching and mentoring practices that foster inclusiveness and diverse experiences, promoting equal participation of all groups

- continually revising teaching methods to avoid approaches that inadvertently hamper the success of students

DBS CODE OF CONDUCT

PURPOSE

In the Division of Biological Sciences (DBS), we aim to be a place where all students, staff, and faculty feel welcome and empowered to succeed (please see DBS Diversity Statement). In the interest of this goal, this code of conduct outlines our expectations for all members of the Division and outlines a procedure for addressing unacceptable behavior.

SCOPE

The University of Missouri has implemented guidelines and policies for conduct in several areas. We expect our members of DBS to be familiar with and adhere to those guidelines and policies. This document does not in any case supersede University-level policy. We do not outline specific consequences of unacceptable behaviors here because this document is not intended to outline disciplinary actions but strategies for resolving problems when they arise. Consequences for repeated unacceptable behaviors will be specific to the situation and handled by a supervisor or University disciplinary body as appropriate.

EXPECTED BEHAVIOR

The following behaviors are expected and requested of all members of DBS:

- Be welcoming, considerate, and respectful in your speech and actions towards all members of DBS. Make an effort to consider how your speech and actions will affect others.
- Be an active participant in the Division. DBS works best when everyone is committed to contributing to our mission.
- Strive to communicate openly with others, always seeking collaboration over conflict.
- Be clear about your expectations of other members of DBS. For example, graduate students and mentors should be familiar with the Graduate School's [Guidelines for Good Practice in Graduate Education](#) and consider creating a lab document for more individual lab-specific expectations.
- Be honest and hold oneself to a high ethical standard.

UNACCEPTABLE BEHAVIOR

- DBS, like the University of Missouri, [prohibits discrimination and harassment](#) bias-motivated violence, sex-based violence, or retaliation under any circumstances. This behavior includes but is not limited to violence, threats, bullying, unwelcome sexual attention, and/or sexist, racist, homophobic, transphobic, ableist, or otherwise discriminatory jokes and language.
- Yelling, name-calling, and insults are unacceptable ways to communicate with other members of DBS.

REPORTING GUIDELINES & CONFLICT RESOLUTION STRATEGIES

All DBS members are expected to adhere to this code of conduct. Anyone asked to stop unacceptable behavior is expected to comply immediately. When a member of DBS is not behaving according to these expectations or is engaging in unacceptable behaviors, the following conflict resolution strategy should be pursued.

1. The preferred first approach for all members of DBS is to resolve the issue by direct, open communication. Note that one of our expectations for DBS members is to strive to communicate openly with others, always seeking collaboration over conflict. We encourage DBS members to speak directly to the parties involved to attempt a resolution when possible. DBS members may also consider seeking informal mediation of the issue with the assistance of other DBS members. For example, graduate students may reach out to the Director of Graduate Studies, members of the Graduate Education Committee, their other committee members, or the Director of DBS.
2. If resolution is not possible via direct communication with the parties involved, we encourage DBS members

to report the issue to either your representative on Divisional Council or the Director of DBS. In either case, the report will result in a more formal conflict resolution process being initiated as appropriate, depending on the positions of those involved (i.e., faculty, staff, and/or graduate students).

- Conflicts involving faculty members or staff will be referred to the MU [Employee Assistance Program](#) for mediation.
 - Conflicts involving graduate students and/or postdoctoral scholars will be referred to the Assistant Vice Provost for Graduate and Postdoctoral Affairs. Graduate students can also contact Assistant Vice Provost for Graduate and Postdoctoral Affairs directly if they prefer not to issue a report to their representative on Divisional Council or the Director of DBS.
 - Conflicts involving undergraduate students will be referred to the Associate Director of Undergraduate Studies [Dr. Bethany Stone](#)
3. If not all parties are satisfied with the resolution reached in steps 1 and 2, the complaint may be escalated to the University of Missouri [grievance reporting mechanism](#)

Privacy and confidentiality: Every attempt will be made to ensure privacy and confidentiality when handling reports. Members of DBS who receive reports are expected to keep all reports confidential. However, some violations, including those regarding discrimination, bias-motivated violence, sex-based violence, and retaliation, will be [reported to the Office of Institutional Equity](#). DBS will not be part of a culture of silence that might allow these violations to persist in our community. You should therefore know that further action may be taken at the University level. The Office of Institutional Equity lists [confidential and non-confidential resources](#) on campus.

APPLICATION & ADMISSION

DEGREES

The Division of Biological Sciences (DBS) offers two graduate degrees: the Master of Science (M.S.) degree and the Doctor of Philosophy (Ph.D.) degree.

ADMISSION REQUIREMENTS

All applicants must fulfill the [minimum admission requirements of the Graduate School](#) and show a likelihood of completing the degree that they are pursuing.

DBS prioritizes evidence of attributes such as drive, diligence, passion for sharing scientific knowledge, and a willingness to take scientific risks over metrics such as GPA, standardized test scores, and other similar quantifications. Therefore, the application process should be seen as an opportunity to highlight these attributes through essays and letters of reference.

Most graduate students in our program connect with potential advisors before submitting their applications. These early interactions are crucial for determining if an applicant's research interests align with the projects of specific advisors and labs and the broader research strengths of DBS.

APPLICATION

Applicants to the DBS graduate program are considered once a year for Fall admission. The components of the application, all of which are submitted online through Slate, are as follows.

1. [Application for admission](#) (online through the Graduate School)
2. [Unofficial transcripts](#) from each college or university attended. If offered admission, students must submit official transcripts to the Graduate School. International students coming from overseas may hand-deliver their official transcripts to the Graduate School. Official transcripts must be submitted by the first semester, or students cannot register for a second semester.
3. [Research Essay](#) describing previous research experience and how it has influenced the topic(s) being pursued for graduate school.
4. [Personal Statement](#) discussing reasons for pursuing a graduate education.
5. Names and contact information for [three references](#) who have agreed to write letters of recommendation; letters should comment on the applicant's potential for success in graduate work.
6. [Resume/CV](#) to include (as applicable) research experiences, publications, conference attendance, presentations, awards/honors, teaching experience, and extracurricular activities
7. English [Language Proficiency Exam](#). Applicants who did not receive their primary and secondary education (K-12) in [an exempt country](#) must submit IELTS or TOEFL scores. The [Minimum English Proficiency Test Scores](#) for admission to DBS are 7 on the IELTS and 100 on the TOEFL.

GRE Scores: DBS does not consider Graduate Record Examination (GRE) scores as criteria for admission to the graduate program. Applications that include GRE scores will have the scores removed before any evaluation occurs by the faculty or the Graduate Education Committee.

Application deadline: December 1

Fee waivers: The Graduate School offers [application fee waivers](#) to select students. DBS faculty can cover the application fee for a prospective student if they wish. To do this, the faculty member must provide the applicant's name, email address, and a MoCode to the DBS Graduate Support Staff (currently Melody Kroll, krollmm@missouri.edu) before the application deadline of December 1.

ADMISSION PROCESS

The admissions process is managed by the Division's Director of Graduate Studies (DGS) and Graduate Education Committee (GEC). The primary goal is to find applicants who are a strong fit with a mentor or lab as well as with the department's broader research strengths. The GEC especially values candidates who could thrive in multiple

labs, as this approach encourages a collaborative student body, offers more choices for research rotations and mentors, and helps foster a supportive community that boosts student retention.

The admissions process, though coordinated by the DGS and GEC, involves multiple faculty assessments at both the application review and interview stages. To ensure fairness, all feedback is structured using standardized rubrics that are shared in advance.

The admissions process begins with a review of all applications by DBS faculty. Their feedback to the GEC is used to select applicants to interview. Applicants invited to interview will meet with two faculty members, a member of the GEC, and current graduate students. The primary goal of these interviews is to assess the applicant's fit with a potential mentor as well as their alignment with the department's broader research strengths. Following the interview, the GEC reviews feedback from faculty and decides which students to recommend for admission. A final offer of admission is always contingent upon the Graduate School's formal review and receipt of all required application materials.

While fall admission is standard, students may defer their start for one year without reapplying. A summer start is an option, particularly if a field season is desired and only if the faculty member can cover the student's summer salary, tuition, and medical insurance. A spring start is only permitted in exceptional circumstances.

ORIENTATIONS

All newly admitted graduate students must attend the following orientations. The DBS Teaching Professional Development is required even if the student will not be a TA immediately.

- New Graduate Student Orientation, MU Graduate School
- Graduate Teaching Orientation (GTO), MU Graduate School
- DBS Teaching Professional Development, hosted by Dr. Bethany Stone
- DBS New Student Orientation, hosted by the GEC
- International Student Orientation, hosted by MU International Office (as applicable)
- Fellowship Orientation (as applicable)

ASSISTANTSHIPS

In principle, DBS is committed to providing financial support to all admitted graduate students through the duration of their graduate study. In most cases, support is in the form of a 0.5 FTE Graduate Teaching Assistantship (GTA). This may be supplemented by graduate research assistantships (GRAs), grants, and fellowships. A 0.5 FTE GTA/GRA includes a stipend, student medical insurance, and tuition.

Graduate assistantships are subject to university and departmental funding. Adequate progress toward completing the degree and evidence of satisfactory performance and conduct are required for renewal, in addition to available funding. Assistantships are awarded annually. On occasion, an assistantship may be for a single semester. Assistantships may be terminated during the academic year if a student's performance is documented as unreliable, unprofessional, or otherwise unacceptable.

STIPENDS

The base stipend (for the two academic-year semesters) for a GTA is \$24,000. The student's Primary Advisor provides an additional \$6,000 summer salary for a total stipend of \$30,000. Graduate students are paid \$2,400/mo (pre-tax) from August through May (10 months), then \$3,000/mo. (pre-tax) in June and July.

GRAs are appointed by individual faculty members with funded research grants. The stipend amount for students supported on a GRA must be at least the same as for a GTA and must be 0.5 FTE.

TUITION SUPPORT

Graduate students with a qualifying assistantship or fellowship (0.5 FTE) are eligible for tuition support, as administered by the [Graduate Student Support Program](#). The tuition support does not cover [mandatory fees](#): student health fee, recreation center fee, student activity fee, and (as applicable) international student services fee. The student is responsible for mandatory fees plus any late fees unless other arrangements are made (e.g., covered by a Fellowship). Tuition support is covered by DBS for GTAs and by the PI for GRAs. Please note: Tuition subsidies are subject to [time limits](#) set by the Graduate School.

M.S. DEGREE REQUIREMENTS

SUMMARY OF DEGREE REQUIREMENTS

- Register for required courses: BIO_SC 8050 (2 credits), BIO_SC 8060 (1 credit), BIO_SC 8087 (4 credits), and BIO_SC 8187-01 (4 credits).
- Determine additional coursework to meet the 30-credit-hour requirement
- Complete Plan of Study in consultation with Primary Advisor (M1 form)
- Design a thesis project in consultation with Primary Advisor
- Form a thesis committee (M2 form) and meet annually
- Maintain full enrollment (at least 9 credits in the Fall and Spring semesters)
- Maintain a GPA of 3.0
- Submit activities and annual evaluation through myVITA and meet with the GEC annually
- Satisfactorily perform duties associated with assistantship or fellowship
- Conduct thesis research
- Write, orally defend, and submit research thesis (M3 Form)

ACADEMIC PROCESS FOR M.S. STUDENTS

Design Thesis Project

M.S. students are admitted directly to a lab with a defined thesis project. The research project must be appropriate for completion within 2 years and MUST result in a thesis and defense.

Form Thesis Committee

The Thesis Committee is responsible for the composition, administration, and evaluation of the student's Program of Study; advising the student throughout graduate study; and evaluating the thesis and the final defense.

The Thesis Committee is composed of three members of the MU Graduate Faculty. Two members must be from DBS. The third member may or may not be from DBS. The composition of the Thesis Committee is communicated to the Graduate School via the [M2 – Request for Thesis Committee Form](#).

Any changes to the composition (other than the Primary Advisor) must be reported to the Graduate School using the [Change of Committee](#) form. Due to the short timeframe of the M.S. degree, any change to the Primary Advisor must be approved by the DGS first before being reported to the Graduate School via the [Application for Graduate Change of Program, Degree, Emphasis, or Advisor form](#).

The first meeting of a student's Thesis Committee should occur before the end of the student's second semester.

Submit Program of Study

The [M1 – Program of Study for the Master's Degree Form](#) outlines the courses the student intends to take to meet the 30-hour credit limit for the M.S. degree. The student completes this form with their Primary Advisor. The M1 form must be filed with the Graduate School by the end of the student's second semester.

The student must complete all courses listed on the M1 form. If a change is necessary, a Plan of Study Course Substitution Form must be completed and filed with the Graduate School before applying for graduation.

Schedule Annual Committee Meetings

DBS requires students to meet annually with their Thesis Committees. At these annual meetings, the student is responsible for updating members on the status of their research and on any changes to goals. The committee should give feedback on the student's research direction and assess their progress toward their research goals and other milestones. The annual meeting is communicated to the DGS via the [Annual Committee Meeting Form](#). Although completed by the Primary Advisor, the responses should reflect the views/intentions of the committee. The GEC recommends that students provide their committee with an updated CV, IDP, any published articles co-authored by the student, and grant proposals related to the research at each annual meeting.

The student is responsible for organizing the annual meetings with their Thesis Committee. It is good practice to schedule the meeting at least 6-8 weeks in advance.

Please note: Students who have not met with their committee in over a year will not be allowed to register for research credits and may be subject to academic probation.

Write Research Thesis

DBS requires a thesis for the M.S. degree. The thesis must be the student's own work and must demonstrate a capacity for research and independent thought.

The student is responsible for adhering to the Graduate School [Guidelines for preparation of the thesis](#). The GEC recommends the style manual published by the Council of Biology Editors, Inc., for questions of punctuation, capitalization, and other matters of general style, and the format of the premier journal in their specific research discipline for references to articles. All other style issues are at the discretion of the Primary Advisor.

The Primary Advisor and Thesis Committee should review the thesis before the public/closed-door defense. The Primary Advisor sets the timeline for the review process in consultation with the student's Thesis Committee. In general, the GEC recommends that the student provide a complete thesis draft to their Primary Advisor at least six weeks before the defense date. The student should allow two weeks for revisions by their Primary Advisor before submission of their thesis to their Thesis Committee for review. The committee should have two weeks to review the thesis before the defense.

Defend Thesis

In DBS, the thesis defense involves a public research seminar followed by a closed meeting of the student with their Thesis Committee. The seminar takes place in a public forum at a time and venue determined by the student in consultation with the Thesis Committee. The public seminar is 45 minutes long with 15 minutes for questions and answers. The seminar should be scheduled as part of DBS's Graduate Seminar Series whenever possible. DBS allows questions of the student by anyone in attendance, including members of the Thesis Committee.

The closed meeting with the Thesis Committee occurs immediately after the public seminar. At the closed meeting, committee members may ask the student additional questions about the research presented during the research seminar as well as in the thesis. At the end of the closed meeting, the student is asked to leave, and the Thesis Committee is given time to decide whether to approve the defense. For the thesis to be successfully defended, the student's committee must vote to pass the student on the defense with no more than one dissenting or abstaining vote. This decision is communicated to the Graduate School via the [M3 – Report of the Master's Degree Examining Committee Form](#), which must be completed and signed by all committee members and then forwarded through the DGS to the Graduate School as soon as possible after the defense and no later than by the semester [deadline](#).

Note: Approval of the written thesis takes place separately by signing the approval page.

For more details about the thesis defense, please review the [DBS Master Thesis Defense Guidelines 2025.pdf](#).

Submit Thesis to the Graduate School

The student must follow the Graduate School's [guidelines](#) on the order and format of the Master's thesis. Submission occurs through Canvas (which the Graduate School grants the student access to) and includes

supplementary paperwork, including an electronic release form, signed approval page, and a publishing agreement form. The student is responsible for paying the required processing fee and submitting the thesis by the semester [deadlines](#).

The committee must approve the written thesis by signing the approval page (an unsigned copy of the approval page is included in the submitted thesis).

The oral defense and written thesis must be completed successfully to complete the degree.

Apply to Graduate

The student must complete the Graduate School [Application for Graduation](#) by the semester [deadline](#). They must be registered for at least 1 credit during the semester they apply to graduate, including the summer semester.

Students who need to switch their application from Spring to Summer or withdraw their application to graduate must contact the Graduate School. Students can incur a fee for changing or withdrawing their application.

Attend Commencement

Students must RSVP to attend commencement. The deadline to be listed in the commencement book is earlier than the deadline to attend. It is the responsibility of the student to be aware of these [deadlines](#). The Spring semester ceremony is held in May, and the Fall semester ceremony is held in December. A student completing a degree during the Summer should review the Graduate School's [summer participation policies](#).

Students can purchase regalia from the MU Bookstore, and faculty can rent or purchase regalia through the [Mizzou Store](#). DBS has three regalia sets (small, medium, large) for graduate students in Tucker 218. These regalia are loaned out on a first-come/first-served basis and must be returned promptly.

COURSEWORK REQUIRED FOR M.S. DEGREE

MU requires a 30 credit hours of graduate work beyond the bachelor's degree for a Master's degree. Fifteen of the 30-hour must be selected from courses numbered at the 8000 or 9000 level. No more than 40 percent (12 credit hours) of the 30-hour credit requirement can be satisfied by research courses (i.e., BIO_SC 8090). A student's Thesis Committee must approve all coursework used to fulfill the credit-hour requirement.

Table 1: Required coursework

Course Number	Course Name	Register Period	Total Credit hours
BIO_SC 8050	Professional Skills	Year 1, Fall Semester	2
BIO_SC 8060	Ethical Conduct of Research	Year 1, Spring Semester	1
BIO_SC 8087	DBS Seminar	Continuous enrollment (1 credit/semester)	4
BIO_SC 8187-1	Graduate Student Seminar	Continuous enrollment (1 credit/semester)	4
BIO_SC 8090	Research	Continuous enrollment	1-12
7000-9000 level	Courses in research area	Continuous enrollment	≥ 7

LENGTH OF STUDY POLICY

It is expected that most students complete their M.S. degree within two (2) years. The degree must be completed within three (3) years beginning with the first semester of enrollment in which the student is accepted. For any extension of this time limitation, the student must petition the DGS in writing before the end of their fifth semester. The DGS will notify the student and their Primary Advisor in writing of the decision.

GOOD ACADEMIC STANDING

A student's academic standing in DBS is based on:

- Meeting all requirements, including courses, forms, and deadlines
- A GPA of 3.0 or greater. When a student's GPA falls below 3.0, they receive more than 2 C grades in graduate courses, or spend two consecutive semesters on academic probation, they will be notified in writing that their performance is not satisfactory.
- Satisfactory research performance, as assessed by the Primary Advisor.
- Satisfactory performance toward assistantship, as assessed by Dr. Bethany Stone (if GTA) or Primary Advisor (if GRA)
- Full-time enrollment.

Unsatisfactory performance can result in dismissal from the M.S. program. The decision regarding a student's standing is made by the DGS in consultation with the student's Primary Advisor and the GEC. It can be appealed to the DBS Director and then to the [Graduate Faculty Senate Committee on Graduate Student Appeals](#).

PH.D. DEGREE REQUIREMENTS

SUMMARY OF DEGREE REQUIREMENTS

- Select a Primary Advisor
- Form and meet with the Doctoral Program Committee (D1 form)
- Enroll in BIO_SC 8050 (Fall, Year 1), BIO_SC 8060 (Spring, Year 1), BIO_SC 8087 (10 semesters), and BIO_SC 8187-1 (6 semesters)
- Determine additional coursework to meet the 72-credit-hour requirement
- Complete Plan of Study (D2 form)
- Maintain full enrollment (at least 9 credits in the Fall and Spring semesters)
- Maintain a GPA of 3.0
- Design a dissertation project in consultation with Primary Advisor and Doctoral Program Committee
- Meet annually with the Doctoral Program Committee
- Report and submit activities and evaluation via MyVita and meet with the GEC annually
- Satisfactorily perform duties associated with Assistantship/Fellowship
- Satisfactorily pass the Comprehensive Examination within 3 years of enrollment (D3 Form)
- Satisfactorily perform dissertation research under the supervision of the Primary Advisor and Doctoral Program Committee
- Satisfactorily write, defend, and submit a research dissertation (D4 form)

ACADEMIC PROCESS FOR PH.D. STUDENTS

Select Primary Advisor

The student identifies a Primary Advisor who is willing to mentor their dissertation research. Those who choose a faculty member who is not a [core DBS faculty member](#) must arrange for a "Co-Chair" from DBS. The choice of Primary Advisor is subject to final approval by the DGS, GEC, and the DBS Director. DBS requires students to select their Primary Advisor before the end of their second semester since the student's summer salary is covered by the Primary Advisor. Any change to the Primary Advisor must be reported to the Graduate School.

Form Doctoral Program Committee

The Doctoral Program Committee is responsible for the composition, administration, and evaluation of the student's Program of Study; advising the student throughout graduate study; evaluation of the written and oral components of the Comprehensive Examination; and evaluation of the dissertation and the final defense.

The Doctoral Program Committee is composed of four members of the MU Graduate Faculty. The Doctoral

Program Committee must include three faculty members from the Division of Biological Sciences; the fourth faculty member may be from DBS or a different academic department. The student's Doctoral Program Committee is communicated to the Graduate School via the [D1 – Qualifying Examination Results and Doctoral Committee Approval Form](#). Any changes to the committee (except the Primary Advisor) must be reported to the Graduate School using the [Change of Committee form](#).

Convene first Committee Meeting - Qualifying Exam and Program of Study

The Qualifying Exam occurs at the first meeting of the student's Doctoral Program Committee. This meeting should happen before the end of the student's second semester.

In DBS, the Qualifying Exam consists of an oral presentation on the topic the student plans to pursue as part of their graduate program. It is followed by a question-and-answer period to determine specific areas the student needs to become familiar with to accomplish their research interests. The committee should also discuss the student's Plan of Study and recommend changes based on the Q&A discussion. A student is not required (and/or expected) to have a specific project and/or preliminary data at this stage.

Committee members should vote "pass" or "fail" after the question period. The decision is recorded on the [D1 - Qualifying Examination Results and Doctoral Committee Approval Form](#) and signed by the Primary Advisor, student, and DGS. Committee members agree with the student's Plan of Study by signing the [D2 - Plan of Study for the Doctoral Degree Form](#). The student is responsible for submitting the signed D1 and D2 forms to the DGS following completion of the first committee meeting and before the end of their second semester.

The student is required to complete the courses reported on their D2 form. If a change is necessary, a [Plan of Study Course Substitution Form](#) must be filed with the Graduate School before applying to graduate.

Schedule Annual Committee Meetings

DBS requires graduate students to meet annually with their Doctoral Program Committee. The student is responsible for providing members with an update on the status of their research and on any goal changes. Committee members should provide feedback on the student's research direction and assess their progress toward research goals and other milestones. The annual meeting is communicated to the DGS via the [Division's Annual Committee Meeting Form](#). While completed by the Primary Advisor, the responses on the form should reflect the views of the committee.

The student is responsible for organizing the annual meetings with their Doctoral Program Committee. It is recommended that the student schedule the meeting at least 6-8 weeks in advance. The GEC recommends that students provide their committee with an updated CV, IDP, any published articles co-authored by the student, grant proposals related to research, and teaching and research statements.

Please note: Students who have not met with their committee in over a year will not be allowed to register for research credits (BIO_SC 9090) and may be subject to academic probation.

Pass Doctoral Comprehensive Examination

The doctoral degree requires successful completion of the Comprehensive Exam. Per the Graduate School, a student must substantially complete the coursework outlined in the Plan of Study to the satisfaction of the Doctoral Program Committee (and with a GPA of 3.0 or higher) before taking the Comprehensive Examination. **DBS recommends the Comprehensive Examination be completed as early as the end of the student's second year (semester 4) and requires it before the end of the student's third year (semester 6).** The aim of the Comprehensive Exam is to ensure that a student understands both the field, in general, and their research focus, and is prepared to complete a dissertation.

The Comprehensive Exam consists of written and oral sections. The format of the written part of the exam usually takes the format of an NIH F31 proposal, an NSF dissertation improvement proposal, or a similar trainee proposal. Generally, the written document should not be longer than 15 pages, excluding references. An oral presentation of

the proposal and responses to questioning by the committee satisfies the oral component of the exam. The oral component of the exam MUST take place AFTER the written portion has been approved by the committee. The two sections of the examination must be completed within one month.

The committee's decision is recorded on the [D3 - Doctoral Comprehensive Examination Results Form](#) and submitted to the Graduate School no later than two weeks after the Comprehensive Exam takes place. A failure of either the written or oral components of the exam constitutes failure of the Comprehensive Exam and must follow [University guidelines for Exam Failure](#).

The [Comprehensive Exam Guidelines.pdf](#) provides additional details about the components of, and process for, the Comprehensive Exam in DBS.

Advance to Candidacy and Maintain Continuous Enrollment

Advancement to candidacy for a doctoral degree is established by passing the comprehensive examination. Status as a continuously enrolled doctoral student begins the term after the term in which the comprehensive exam was successfully completed. Students must maintain continuous enrollment during their candidacy (the period after successful completion of the comprehensive examination). Candidacy is maintained by enrolling in at least 2 credit hours each fall and spring semester and 1 credit hour during the summer semester, up to and including the term in which the dissertation is defended. Failure to enroll continuously until the doctoral degree is awarded terminates candidacy.

Write Dissertation

Upon research completion and approval of the Primary Advisor and Doctoral Program Committee, the student will prepare the dissertation. The student is responsible for adhering to the Graduate School [guidelines](#) regarding the preparation and format of the dissertation. The GEC recommends the Style Manual published by the Council of Biology Editors, Inc., for questions of punctuation, capitalization, and other matters of general style, and the format of the premier journal in their specific discipline of research for references with the full title and inclusive page numbers of the articles. All other matters of style are at the discretion of the Primary Advisor.

A review of the dissertation by the primary advisor and Doctoral Program Committee should take place before public and closed-door defenses. The timeline for the review process is set by the Primary Advisor in consultation with the student's Doctoral Program Committee. In general, the GEC recommends that the student provide a complete draft of the dissertation to their Primary Advisor at least six weeks before the defense date and allow two weeks for revisions with their advisor before submission to the Doctoral Program Committee. The committee should have at least two weeks to review the dissertation before the defense. The students should allow two weeks, at a minimum, after the closed-door defense for revisions before the final submission of the dissertation to the Graduate School.

Defend Dissertation

The dissertation defense involves a public research seminar followed by a closed meeting of the candidate with the Doctoral Program Committee. The research seminar occurs in a public forum at a time and venue determined by the student and their Doctoral Program Committee. In DBS, the seminar is 45 minutes long plus 15 minutes for questions and answers. The seminar should be scheduled as part of the DBS's Graduate Seminar course whenever possible. DBS allows a student to be asked questions by committee members and anyone in attendance during the defense.

The closed defense with the committee occurs immediately after the public defense. At the closed defense, committee members may ask the student additional questions about the research presented in the dissertation and may request changes to the document. At the end of this closed meeting, the student will leave, and the committee will be given time to decide whether to approve the oral defense and, as necessary, on what conditions.

The [D4 - Report of the Dissertation Defense Form](#) reports whether the student has successfully orally defended the dissertation. The form must be completed and signed by all committee members and then forwarded through the

DGS to the Graduate School within 30 days of the defense. For the dissertation to be successfully defended, the student's doctoral committee must vote to pass the student on the defense with no more than one dissenting or abstaining vote. Failure of the written and/or oral defense results in termination of the degree and is not subject to appeal.

Submit Dissertation to the Graduate School

The Doctoral Program Committee approves the written dissertation by signing the [approval page](#) (an unsigned copy of the approval page is included in the submitted dissertation). The oral defense and written dissertation must be completed successfully to complete the degree.

Every doctoral candidate should review the Guidelines for Preparing Theses and Dissertations from the Graduate School. Students can enroll in a Canvas Organization that provides this information and mechanism to submit the approved written dissertation. Submission includes supplementary paperwork, including an electronic release form, signed approval page, and a publishing agreement form. The student is responsible for any processing fees and for submitting the dissertation materials by the semester [deadlines](#). It is the responsibility of the student to be aware of and meet these deadlines and formatting requirements.

Once the final copy of the dissertation is approved by the Graduate School and all other degree program requirements have been met, the student will be recommended for degree conferral.

Apply to Graduate

The student must complete the Graduate School [Application for Graduation](#) by the semester [deadline](#). They must be registered for at least 1 credit during the semester they apply to graduate, including the summer semester.

Students who need to switch their application from Spring to Summer or withdraw their application must contact the Graduate School. There is an application fee to graduate. Students can incur an additional fee by switching or withdrawing their application.

Attend Commencement

Students must RSVP with the Graduate School to attend commencement. The deadline to be listed in the commencement book is earlier than the deadline to attend. Spring semester ceremonies are held in May, and Fall semester ceremonies are held in December. Students completing degrees during the Summer should review the [summer participation policies](#).

DBS hosts an informal ceremony for its graduates before the commencement ceremony in May. Students who will be completing the Ph.D. degree in the spring or summer, as well as the previous fall, are invited to participate.

Students can purchase regalia from the MU Bookstore, and faculty can rent or purchase regalia through the [Mizzou Store](#). DBS has three regalia sets (small, medium, large) for graduate students in Tucker 218. These are loaned out on a first-come/first-served basis and must be returned promptly.

COURSEWORK REQUIRED FOR PH.D. DEGREE

MU requires 72 hours of graduate credit beyond the bachelor's degree (or its equivalent) for a doctoral degree. Fifteen of the 72-hour must be selected from courses numbered at the 8000 or 9000 level. A student's dissertation committee must approve all coursework used to satisfy the credit-hour requirement.

Table 2: Course Requirements for Ph.D. students

Course Number	Course Name	Register Period	Total Credit hours
BIO_SC 8050	Professional Skills	Year 1, Fall Semester	2
BIO_SC 8060	Ethical Conduct of Research	Year 1, Spring Semester	1

Course Number	Course Name	Register Period	Total Credit hours
BIO_SC 8087	DBS Seminar	Continuous enrollment (1 credit/semester)	10
BIO_SC 8187-1	Graduate Student Seminar	Continuous enrollment for Years 1-3 (1 credit/semester)	6
7000-9000 level	Courses in research area	Continuous enrollment	≥ 15
BIO_SC 9090	Research	Continuous enrollment	~38 h

LENGTH OF STUDY POLICY

The Ph.D. degree must be completed within five (5) years beginning with the first semester of enrollment. For any extension of this time limitation, the student must petition the DGS in writing before the end of the 9th semester of enrollment in the program. The DGS will notify the Primary Advisor in writing of the decision.

GOOD ACADEMIC STANDING

A student's academic standing in DBS is based on:

- Meeting all requirements, including courses, forms, and deadlines
- A GPA of 3.0 or greater. When a student's GPA falls below 3.0, they receive more than 2 C grades in graduate courses, or spend two consecutive semesters on academic probation, they will be notified in writing that their performance is not satisfactory.
- Satisfactory research performance, as judged by the Primary Advisor
- Successful completion of the Comprehensive Examination with a "Pass" decision
- Satisfactory performance toward assistantship, as assessed by Dr. Bethany Stone (if GTA) or Primary Advisor (if GRA).
- Full-time enrollment.

Unsatisfactory performance for failure to meet the usual examination and grade requirements can result in dismissal from the Ph.D. program. The decision regarding a student's standing in DBS is made by the DGS in consultation with the Primary Advisor and GEC. It can be appealed to the DBS's Director, and then to the [Graduate Faculty Senate Committee on Graduate Student Appeals](#).

COURSES

REQUIRED COURSES

BIO_SC 8050, Professional Survival Skills

This course provides first-year graduate students a forum to discuss current issues of inclusion and equity, particularly as it relates to STEM fields and more generally academia, mentor-mentee dynamics, transition from undergraduate to graduate students, and formation of a committee, among other topics.

BIO_SC 8060, Ethical Conduct of Research

This course covers ethical issues in biological research, including the rules and conventions for appropriate research conduct.

BIO_SC 8087, DBS Seminar

This course invites researchers to address current topics in the biological sciences.

BIO SC 8187, Graduate Student Seminar

This course, which is taken every fall and spring semester in years 1-3, combines targeted professional development talks with student seminars. The goal is to provide students with multiple opportunities to deliver oral presentations and updates on their research throughout their graduate careers. Students are invited to give a talk about their first-year projects at the end of the spring semester in year 1 and give updates about their research at various points through their program of study. By the time of their defense, Ph.D. students will have presented one 15-minute talk, one 30-minute talk, and one 45-minute talk, and M.S. students will have presented one 15-minute and one 45-minute talk. Student defenses are scheduled as part of this course.

BIO SC 8090, Research Toward Thesis

This course is for research toward the M.S. thesis degree.

BIO SC 9090, Research Dissertation

This course is for research toward the Ph.D. degree.

RECOMMENDED COURSES

BIO SC 7990, Non-thesis research (research rotations)

A student may do a rotation to learn about projects with potential Primary Advisors, new techniques, and/or new areas of science. Thus, rotations in very different focal areas are highly recommended. Rotations are either four weeks or eight weeks in duration. The rotation length is determined by the student and the student's Primary Advisor (if known) in consultation with the sponsoring lab. Generally, 1 credit is equivalent to a 4-week rotation and 2 credits is equivalent to an 8-week rotation. A permission number is required to register for BIO SC 7990. Students must provide the name(s) of the sponsoring labs and duration(s) of the rotation(s) to obtain a permission number. During a rotation, the student is expected to perform as a full member of the laboratory. The student should have a desk, a laboratory bench, and a defined project supervised and guided by a laboratory member. The rotation laboratory should serve as an academic home, and the student should participate in all usual laboratory activities, particularly weekly lab meetings. Each sponsoring faculty member will provide Dr. Manuel Leal with an assessment of the student's performance in the assignment of a grade.

BIO SC 8640, Quantitative Methods in Life Sciences

This course is designed for the specific needs of students doing research in the life sciences, focusing on statistical literacy: performing, interpreting, and writing about biological data analysis. The course will cover most topics broadly and occasionally in great depth, highlighting the perils and pitfalls of different methods, while providing guidelines for a wide array of statistical approaches to data analysis. The course seeks to find the balance between really understanding all the math involved and learning to be a competent practitioner and consumer of analysis, emphasizing the practical over the theoretical, with additional focus on the communication of data (plotting, graphs, figures) and of results. Graded on an A-F basis only.

BIO SC 8723, Pedagogical Prep for Biological Science graduate Teaching assistants

This course is designed for graduate students who assist in science courses. The main goals of this course are for GTAs to become familiar with the basic elements of scientific teaching, to practice and improve inclusive and evidence-based teaching techniques, and to monitor, reflect, and assess teaching and learning in their classrooms. Another goal is to create a community of science GTAs who can provide long-term teaching support to each other.

GRADING AND CREDIT POLICIES FOR GRADUATE STUDENTS

The Graduate School [Grading and Credit Policies website](#) defines and details policies regarding

satisfactory/unsatisfactory (S/U) grades, Unreported Grades (NR), Incompletes, Graduate-Level Courses, Grade Point Averages, GPA, and Probation and GPA and Graduation for graduate students.

DBS considers grades “A” and “B” passing grades. Grades in the “C” range are considered unsatisfactory, and the student must retake the course(s). A required course must be completed with a “B” or better grade to remain a Ph.D. student in good standing. No D grade may be awarded to a graduate student, and a grade of F means the work has not satisfied the minimum requirements of the course. A grade of “F” in required courses can result in dismissal from the graduate program in Biological Sciences, for lack of making “satisfactory progress”. Only graduate students in good standing may take the Comprehensive Exam.

ANNUAL REVIEW OF GRADUATE STUDENT PERFORMANCE

DBS and the Graduate School require all graduate students to submit an annual academic progress report. Annual reviews take place during the spring semester.

PROGRESS TOWARD DEGREE

Students should follow the timeframes associated with degree programs established by DBS. They must submit required forms on time and maintain a grade point average of 3.0 or better. Furthermore, they must successfully undergo the DBS annual review process carried out by the GEC.

DBS ANNUAL REVIEW

The progress of each graduate student is evaluated annually by the GEC. This review has two aims. First, it provides a mechanism to facilitate/promote communication between graduate students and their mentors about progress, expectations, and academic and professional goals. Second, it ensures that students are on track to complete their degree on time and, if not, to identify/address any issues that may be hampering progress. The GEC also uses information from the annual reviews to assess the overall graduate student experience in DBS and identify areas needing improvement.

As part of the annual review, students are required to (1) complete a self-evaluation, (2) complete an evaluation of their Primary Advisor, (3) provide a complete and accurate reporting of their Activities in myVita (as part of the Graduate School’s Annual Review of Performance process, as detailed next), and (4) meet with the GEC. The student’s Primary Advisor will also be invited to complete an evaluation of the student and a self-evaluation of their mentoring. Following the meeting, the GEC will provide a letter to the student and mentor with an assessment of the student’s progress, next steps, and suggested professional development and continuing progress areas.

GRADUATE SCHOOL ANNUAL REVIEW OF PERFORMANCE

The Graduate School coordinates annual reviews for Ph.D. students and graduate assistantships using [myVITA](#). Graduate students must accurately report their academic progress, completion of required forms, awards and honors, conferences, presentations, publications, service activities, creative activities, funding activities, employment, and job placement.

POLICIES

DBS adheres to the [policies](#) set forth by the MU Graduate School and Graduate Faculty Senate. Below are the most common policies, along with details regarding DBS-specific process steps.

ACADEMIC LEAVE OF ABSENCE

DBS adheres to the Graduate School policy regarding [Academic Leave of Absence](#) and [Leaves of Absence for Assistantships and Fellowships](#).

Students wishing to take a leave of absence for a semester or longer must submit a letter of intent addressed to the Dean of the Graduate School that outlines the need for a leave and the requested length of leave. This letter

should be submitted at least 30 days prior to the start of the leave or as soon as possible. This letter should be provided to the DGS, who will forward the letter to the Dean along with a letter acknowledging the leave. DBS provides a [leave of absence letter.dotx](#) template letter.

Please note any assistantship offer from DBS will be suspended during the leave period. Upon the student's return, renewal of the assistantship will be evaluated based on the availability of departmental funds.

USE OF ARTIFICIAL INTELLIGENCE

The [DBS AI Policy-Supervised Research Form.pdf](#) must be jointly signed and completed by the faculty mentor and each M.S./PhD student, and reviewed annually. The form documents lab policies regarding the use of AI tools in thesis/dissertation research and ensures that both parties have discussed expectations for lab-specific practices. Faculty may revise their AI policies as needed and provide updated copies to both the student and the DBS Graduate Education Program. Faculty and students are also expected to be familiar with MU's Information Technology, AI in the Learning Environment Task Force, and DBS Policies on AI use before preparing this form.

ASSISTANCE, ACCOMMODATION, AND LEAVE POLICY FOR PREGNANT STUDENTS, STUDENTS WITH PREGNANCY-RELATED CONDITIONS, AND PARENTING STUDENTS

DBS adheres to the Graduate School policy regarding [Assistance, Accommodation, And Leave Policy For Pregnant Students, Students With Pregnancy-Related Conditions, And Parenting Students](#).

Students wishing to take a leave of absence for a semester or longer must submit a letter of intent addressed to the Dean of the Graduate School. This letter should be submitted at least 30 days prior to the start of the leave or as soon as possible.

The letter must include the signatures of the student, the student's advisor, and the Director of Graduate Studies (DGS). Once signed, the DGS will forward the letter to the Dean of the Graduate School. DBS provides a [leave-request-due to parenting.dotx](#) template letter.

Please note that any assistantship offer from DBS will be suspended during the leave period. Upon the student's return, renewal of the assistantship will be evaluated based on the availability of departmental funds.

PROBATION, TERMINATION, AND APPEAL POLICIES

DBS adheres to the Graduate School policy regarding the [Academic and Departmental Probation, Termination, and Appeals](#) policies (see also [Probation & Termination Policies for Graduate Students](#))

When considering placing a student on probation, the DGS will consider the student's grades, documentation of research progress from their committee and/or advisor (e.g., the Annual Committee Meeting Report and Annual Evaluation), as well as additional information.

If a student is placed on academic probation, the DGS will provide the student a letter explaining the reasons for the probation. The letter will also outline specific expectations the student must meet in order to be removed from probation, as well as the deadline for meeting these expectations. A copy of this letter will be provided to the student's primary advisor and the Graduate School.

If the student does not satisfactorily meet the conditions of the probation, the DGS will notify the student that they have been dismissed from the graduate program with an effective date and an explanation of the appeal process.

Students wishing to appeal dismissal from the DBS graduate program must inform the DGS in writing that they are appealing dismissal within two weeks of dismissal. The letter should document how the student has met each of the conditions of probation described in the letter from their committee. A copy of this letter should be provided to the Dean of the Graduate School. No members of the GEC who are also on the student's committee may participate in the appeal decision. If most of the members of the GEC are also on the student's committee, then an ad hoc committee will be appointed by the Director of DBS to consider the appeal of dismissal.

SICK LEAVE

DBS adheres to the Graduate School policy regarding [Sick Leave](#).

Students with a Graduate Research Assistantship (GRA) are required to inform their primary supervisor when they are taking sick leave. Each laboratory may have additional policies and practices regarding sick leave and the communication process.

Students with a Graduate Teaching Assistantship (GTA) should reach out to their faculty instructor. If they are unable to contact the instructor, they should get in touch with Dr. Bethany Stone (stoneb@missouri.edu). If their course has a substitution list or "phone tree," they should also call the TA who is designated as their substitute.

TEACHING EXPERIENCE

An essential part of a graduate education is learning to communicate effectively as a teacher. All students must participate in the Teaching Professional Development training offered by DBS each August. Those with GTA appointments must also complete the Graduate Teaching Orientation organized by the Graduate School.

GTAs work in conjunction with a faculty member who is an instructor in an undergrad-level course. A student's performance in the classroom is evaluated by undergraduate students and by Dr. Bethany Stone, who uses the [Performance & Renewal Evaluation Criteria for Graduate Assistantships](#) set out by the Graduate School.

ORAL LANGUAGE PROFICIENCY

Missouri requires that students whose first language is not English must demonstrate adequate oral proficiency before they can assist with teaching. Proficiency is demonstrated by passing the University's English Proficiency Interview (EPI), which is administered by the MU [TAILS Program](#) (Teaching Assistant Instructional & Language Support).

Assessment results are given as a proficiency level from 1 to 4. A minimum level of 3 is needed to qualify for a teaching-related role in DBS. Failure to pass the EPI by the end of the first year following matriculation may result in termination from the graduate program unless an equivalent GRA or Fellowship is identified. Students with poor oral proficiency, as evidenced by a score of less than 1 or 2 on the exam, may be required to enroll in a University English course.

CAMPUS TEACHING PROFESSIONAL DEVELOPMENT OPPORTUNITIES ON CAMPUS

The GEC recommends the following resources for graduate students who want additional teaching experience.

- [Teaching for Learning Center](#) (T4LC)
- [Celebration of Teaching Annual Conference](#) (hosted by the T4LC in May)
- [UM System Teaching & Learning Support](#) website

GRADUATE STUDENT RESOURCES

BEST PRACTICES

The GEC is committed to providing graduate students with a positive and productive academic experience during their time with DBS. The committee encourages use of the mentorship tools recommended by the National Academies of Science, Engineering, and Medicine 2019 report titled [The Science of Effective Mentorship in STEMM](#). These practices promote effective, healthy mentorship relationships and experiences. Below are brief descriptions of these tools along with links to resources for further information.

- **IDPs** require mentees to think through their short- and long-term career plans and formulate a path to enact the plans with support from their Advisor. The GEC recommends use of AAAS's [myIDP](#), which is designed for scientists, and the article, [Yearly Planning Meetings: Individualized Development Plans Aren't Just More Paperwork](#), published in *Molecular Cell*.
- The [Entering Mentoring](#) curriculum focuses primarily on mentorship in research training environments, and its

stated aim is to help mentors, at all stages, develop and refine their mentorship abilities.

- A **Lab Values Statement** outlines expectations for lab members and guidelines for maintaining key lab values. Example statements are available from [King Lab](#) in DBS, [Hammond Lab](#) at MIT, [Puckett Lab](#) at the University of Memphis
- **Mentoring Compacts** “provide a structure for mentors to outline expectations from, and commitments to, mentees, and vice versa. Compacts differ from an IDP, which focuses on short- and long-term career plans, as they are focused on expectations for the working relationship on a daily, weekly, or monthly basis.”

PROFESSIONAL DEVELOPMENT

DBS opportunities

Students are strongly encouraged to seek professional development in areas that support their personal and professional goals. DBS covers some topics in its Graduate Seminar (BIO_SC 8187) and Professional Skills (BIO_SC 8050) courses.

Graduate School

The Graduate School offers a comprehensive series of [courses](#), seminars, and [gradEssentials](#) workshops related to career development and exploration, research and innovation, teaching and learning, communication and professionalism, inclusive excellence, health and wellness, leadership and community research.

Beyond the Professoriate Career Training Platform

This online professional development tool allows postdocs and doctoral students to explore career options and learn job search strategies. Through two programs of study (Academic Careers and Professional Careers), students are empowered to make informed decisions about their career path and learn successful job search strategies from other PhDs. To log in, visit [Beyond Prof's Career Training Platform](#), select University of Missouri, and enter your institutional login information.

FORMS

The student is responsible for acquiring and filing the proper forms for submission to the Graduate School. Forms are forwarded through the DGS to the Graduate School. Current versions of these forms are available on the [Graduate School website](#).

Required Forms for the M.A. Degree

M1 form – Program of Study for the Master's Degree

M2 form – Request for Thesis Committee

M3 form – Report of the Master's Examining Committee

Required Forms for the Ph.D. Degree

D1 form – Qualifying Examination Results and Doctoral Committee Approval Form

D2 form – Plan of Study for the Doctoral Degree Form

D3 form – Doctoral Comprehensive Examination Results Form

D4 form – Report of the Dissertation Defense Form

D4A form – Post-graduation Information (DBS-specific form)

Other Required DBS Forms

[Annual Report of Program Committee](#): This form is completed by the Primary Advisor after the student's annual

meeting with their thesis/dissertation committee.

Other Commonly Used Forms

Graduate Certificate Plan of Study

Change of Committee Form

Application for Graduate Change of Program, Degree, Emphasis or Advisor

Plan of Study Substitution Form

TRAVEL GRANTS

DBS Travel Support Program

DBS provides partial support for graduate students to participate in conferences, do field research, or attend workshops or specialized training. Priority is given to doctoral candidates who have passed their comprehensive exam and have a demonstrated record of service to and engagement with DBS. Students should have matching support from their Primary Advisor and are encouraged to seek matching support from other sources. The [application](#) for travel funding should be submitted by no later than one month before the activity for which funding is requested.

Other Funding Resources

Additional travel scholarships for graduate students are available from the [Graduate School](#), the [Graduate Professional Council](#), the Douglas D. Randall Young Scientists Development Fund, and the [Trans-World Airlines Scholarship](#).

GRADUATE STUDENT AWARDS

There are many opportunities for students' research, teaching, and service efforts to be recognized and rewarded by the [Graduate School](#). Some of these awards include the Dissertation Year Fellowship, Distinguished Thesis Award, Distinguished Dissertation Award*, Donald K. Anderson Graduate Teaching Assistant Award*, Donald K. Anderson Graduate Research Assistant Award*, Sandra K. Abell Science Education Award, and the Mary Elizabeth Gutermuth Award for Community Engagement.

Those marked with an asterisk (*) require a nomination from DBS. Students who wish to be considered for this award should notify the DGS by November 30. Candidates will be asked to provide appropriate materials for the GEC to decide who to *nominate for the award*.

DIVISIONAL INVOLVEMENT

Involvement in the academic life of DBS and campus is essential to the graduate education experience. DBS considers this participation when deciding about nominations for departmental and campus awards and travel grants. Graduate students are expected to regularly participate in the following departmental activities:

- DBS Seminar, held Thursdays from 3:00-4:00 in Tucker 18
- Graduate Student Seminar, held Tuesdays from 3:00-4:00 in Tucker 111
- Biology Graduate Student Association
- Annual Research Retreat, held during the Fall semester
- Community Checkup Survey (conducted every Spring semester)
- Graduate recruitment events
- Graduate welcoming events

DBS also offers opportunities for student participation on several committees, including the Graduate Education Committee, Undergraduate Education Committee, Divisional Seminar Committee, and ad hoc faculty search committees. Students interested in participating in these committees should notify the DGS or DBS Director.