



Department of Biological Sciences

Handbook for the PhD Program

Updated 07/25/2025

FOREWORD

The Department of Biological Sciences welcomes you!

We are certain that you will have an excellent and enjoyable educational and professional experience during your graduate studies here at Purdue. The Office of the Vice Provost for Graduate Students and Postdoctoral Scholars (OGSPS) provides service to our graduate students from admission to graduation. The OGSPS directed by the Senior Graduate Program Coordinator, Patricia Dimmitt, LILY 1-120, 765-494-8142, poliver@purdue.edu is your first point of contact when you have questions on policies and procedures regarding our graduate program. This manual outlines the normal sequence of events leading to your advanced degree and should serve as your program-specific guide in addition to the regulations provided by our program and the OGSPS.

Each PhD student is expected to satisfy the various program requirements outlined in this manual. Whereas the OGSPS will provide timely reminders, it remains your responsibility to meet the requirements by the established deadlines. Failure to meet deadlines could prevent you from registering for the subsequent semester and result in late registration fees and delays with receiving financial support. Scheduling annual advisory committee meetings including preliminary examinations and thesis defenses is your responsibility. We encourage students to schedule these important meetings with their committee well in advance.

Exceptions to the normal sequence of events may be requested by writing to the Chair of Graduate Programs. Any request should detail a justification for the exception and be approved, in advance, by the student's advisory committee.

We wish you great success with your thesis research and graduate studies in our program!

Sincerely,

A handwritten signature in black ink, appearing to read "Nicholas Poling". The signature is fluid and cursive, with a period at the end.

Chair of Graduate Programs

Contact Information:

Name	Position/Role	Email	Phone
Dr. Perry Paschou	Professor and Head of Biological Sciences	ppaschou@purdue.edu	765-494-1601
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General Timeline for Meeting Degree Requirements

	<u>Deadline</u>	<u>Forms</u>	<u>Required courses</u>
1st Fall Semester	Non-RAs start lab rotations 2 nd week of semester	Area Required Course Form RA's submit 1st year IDP Form by end of October	BIOL 662 Dept. & Area
1st Spring Semester	Mid - April Submit list of lab choices		BIOL 663 Dept. & Area
2nd Fall Semester	Non-RA's submit 1st year IDP Form by end of October RA's submit 2nd year IDP Form by end of October		Dept. & Area
2nd Spring Semester	1) File Draft EPOS by 2nd week February 2) Submit Final EPOS by 2nd week of March	Hold Prelim before end of semester	Dept. & Area Required Courses Fulfilled
Yearly until Completion	Annual Committee Meetings	IDP (with annual report)	
Degree - Completion	Expected - 5 years	Final Exam / Deposit	

If you find you are out of step in meeting the normal sequence of events, please check with the Chair of Graduate Programs or the Graduate Coordinator to be certain it will not create a problem in meeting your next requirement(s).

PhD Degree Objective

General Requirements

1. Grades and index requirement

Students are required to maintain a minimum cumulative GPA of 3.0 to be in 'Good Standing'. Failure to maintain at least a GPA of 3.0 may be grounds for dismissal from the graduate program.

Only letter grades of A or B may be included on the electronic plan of study (EPOS).

A maximum of 2 Cs are allowed. Courses required for the EPOS with a C grade or lower will need to be re-taken within one year of the date the course was first taken to achieve at least a letter grade of B or better.

Students with 3 Cs or lower will be considered as not meeting the minimum expectations of the program and may be dismissed from the graduate program, irrespective of their overall GPA.

If a course is no longer offered, a request for an alternate equivalent course must be proposed and approved by the area convener and the chair of the graduate program.

A student that receives two 'U' grades for their thesis research credit/course may be dismissed from the graduate program.

2. Credit hours

A minimum of 90 credit hours is required.

16 course-related credit hours with a grade of B or higher; however, most PhD students will take an average of 21 credit hours or more.

All PhD students are required to take a 1-credit ethics course (BIOL 66200), a 1-credit presentation course (BIOL 66300), a statistic course, and a 1-credit seminar course. Other coursework will be area-specific.

Students must register for BIOL 69900 PhD research each semester.

3. Time limitation

PhD students are expected to graduate within 6 years in the program or sooner.

Students that do not complete their degree within 6 years must meet with the graduate program chair to provide a justification for why an extension is necessary.

Additional time beyond 7 years within the PhD program must be approved in advance by the Chair of Graduate Programs. Only approved extensions may be considered for TAs or other department funding.

Students that have been in the graduate program beyond five years will be given low priority in the assignment of departmental funds during subsequent semesters of their graduate study.

Please be aware that failure to meet any deadlines will result in non-approval of registration for subsequent sessions.

4. Residence requirement

Six units of residence are required for the PhD (90 credit hours beyond the baccalaureate degree. At least four units (60 credit hours) for the PhD degree must be earned by continuous residence on the Purdue campus where the degree is to be authorized).

5. Teaching requirement

Students are required to teach for one semester in direct contact with students unless the student has post-baccalaureate teaching experience at the college level. If post-baccalaureate teaching experience – the student must provide official proof in the form of official letter/memo from supervisor at the location the teaching occurred.

Regardless of the student's graduate program or major, all students teaching courses in the Department of Biological Sciences are required to enroll in BIOL 69500PD, Tchg Asst Prof Development. This is a one-credit course devoted to supporting teaching assistants during their first semester of teaching.

All students whose native language is not English must take the Oral English Proficiency Test (OEPT), which is a computer-based test used by the Oral English Proficiency Program (OEPP) to screen prospective teaching assistants for language proficiency. Candidates respond to a variety of questions, present information, and speak extemporaneously on various topics. The responses are recorded and evaluated by at least two trained raters.

Students requiring the OEPP (Speak Test) to become certified to teach must take the test by the end of October of their first year – no exceptions.

Students who have not passed the test prior to taking their Preliminary Exam may be asked to leave the PhD program.

6. Rotation Requirements

PhD students must find a faculty host laboratory either during the recruitment process or during the first year of the program. Students recruited using RAs or TA-direct will go directly into their sponsoring faculty host laboratory. If a student is recruited on a Fellowship or TA-rotate, they will do laboratory rotations in order to find a host laboratory for their dissertation studies. These rotations can only be in labs that are in the Department of Biological Sciences.

Our program has four rotation slots; two in the Fall semester, and two in the Spring semester. Fall #1 is optional, while the other three slots are required unless a student has already joined a laboratory. It is also strongly recommended that students take advantage of all four rotations to maximize their chances of finding a faculty host laboratory.

Joining a lab is not solely based on an agreement between the student and professor, but **MUST** be approved by the Chair of the Graduate Program and the Business Office.

By the end of the 2nd semester graduate students need to submit the Lab Placement Form to the Graduate Office. The completed form must be signed by both the student and Major Professor. These can be turned in in person or emailed to BIOL Graduate Office. Once submitted, the Graduate Coordinator will email the student and advisor once approved.

If a student wants to join a lab after 2 rotations, the student will need to submit a request to the BIOL Graduate Office that will require a confirmation email from the Major Professor.

By the end of the Spring semester, new PhD students will identify labs they wish to join. This typically starts with a conversation about joining the lab and ends with a mutual agreement between the student and the Major Professor. Once agreed upon, the student will submit the completed Lab Placement Form to the BIOL Graduate Office.

The BIOL Graduate Office will then make the assignments, based on mutual acceptability to both the professor and student and final approval by the Chair of the Graduate Program and the Business Office. If a research director cannot be found after 3 rotations, the student will need to meet with the Chair of the Graduate Program to discuss other options such as additional rotations. Additional rotations will only be approved if the student completed the three required rotation slots.

7. Seminar Requirement

Each PhD student is required to take one graduate-level seminar course according to the required course listing for the specific research area.

PhD Degree Objective

Basic Steps

1. PhD required courses within the Graduate Curriculum

Students who entered the program in the Fall 2016 or after must complete the new course requirements as outlined on the graduate program website.

For each research area, the required courses can be viewed on the graduate program website.

2. Rotations

All PhD students, who were recruited on either a TA-rotate or Fellowship must participate in 2-4 rotations during their first year of graduate studies in the Department of Biological Sciences. These rotations can only be in labs that are in the Department of Biological Sciences.

PhD student are allowed to rotate in the same lab twice, although this is discouraged unless the student will be joining that lab for their dissertation studies.

More details about rotations is outlined in the previous section and on the graduate program website.

3. Select the Major Professor

By the end of the spring semester, new PhD students will provide a list of their top three choices for the Major Professor to the BIOL Graduate Office. The Graduate Office will then make the assignments, based on mutual acceptability to both the professor and student and final approval by the Chair of the Graduate Program. If a Major Professor cannot be found after 4 rotations, the student will need to meet with the Chair of the Graduate Program to discuss other options such as additional rotation.

Terminology: “Major Professor” refers to the same faculty as “Research Director” or “Principal Investigator (PI)”. This is the faculty, which mentors the PhD student. The Graduate School uses the term “Chair” for the “Major Professor” for the purpose of the Plan of Study.

If a student cannot find a Major Professor by the end of the summer semester, they may be asked to leave the program.

4. Select a Dissertation Advisory Committee

The Dissertation Advisory Committee consists of the Major Professor (also the Committee Chair), two additional faculty members of the Department of Biological Sciences and one faculty who is not in the Department of Biological Sciences. This external faculty member is typically from another Department at Purdue University, but can also be a faculty at another institution. Thus, the Dissertation Advisory Committee needs to have at least 4 members, one of them being from outside the Department of Biological Sciences. Students who are co-mentored by two faculty members, may have an additional member, for a 5-person committee.

If the external committee member is not at Purdue and not yet in the Purdue Graduate Faculty Database, the student needs to inform the Graduate Coordinator, so that the Coordinator can gather the required information from the external faculty to be added to the Purdue Graduate Faculty Database.

5. Electronic Plan of Study (EPOS)

You should begin developing your Plan of Study (POS) after you join a lab, typically after completion of the first-year of study. The completed POS must be done and submitted by March of the second year. The POS is a formal document required by the OGSPS that identifies your advisory committee, degree objective and your courses. You can begin and change your POS electronically in the Plan of Study generator within *myPurdue*. Your initial plan can be changed, as long as the changes keep you in degree compliance.

The graduate coordinator and all members of the Advisory Committee will receive an electronic notification of the plan of study for review and approval. Only courses that receive a letter grade (A, B) may be included in the EPOS.

Please review the number of credit hours as outlined on the graduate program website.

Courses **not** to be included on a EPOS are:

- Research credits (BIOL 69900)
- Courses taken on pass/not pass option cannot be used on a plan of study.

MS credit will be accepted only after one semester of satisfactory work at Purdue. The Major Professor must indicate the number of credits (0 to 30) that are to apply to the doctoral degree program when they are approving the plan of study.

Courses taken as a graduate student at one other university only may be used towards the total degree credits if they have been used towards only one other advanced degree, but will not count towards program-specific requirements. Similarly, a course taken as an undergraduate may be used if the course was: 1) designated for graduate students; 2) taken during the student's junior or senior year; 3) a grade of B or better was received.

To make minor changes in an EPOS, the student needs to submit a *Request for Change to the Plan of Study* electronically, through *myPurdue*. Changes to remove a failed course will not be approved. If the composition of the Dissertation Advisory Committee or the Examining Committee requires changes, the student must submit a *Request for Change to the Plan of Study* electronically through *myPurdue*.

6. Grade Appeals

For grade appeals, please refer to ‘University Regulations’, the online reference manual for students, staff and faculty that is linked from the graduate program website.

7. Individual Development Plan (IDP)

Students will complete an Individual Development Plan (IDP) each year including their first year in discussion with their Faculty Mentor (prior to joining a lab) or their Major Professor (after joining a lab). These IDPs are training tools to help the student assess progress and succeed in the program. Forms can be found on the graduate program website.

The last page of the IDP signed by both PhD student and Major Professor (or Faculty Mentor) needs to be submitted to the Graduate Office by the end of October and included in their annual report. Lack of IDP submission may result in a student not being allowed to register for the following semester/term.

8. Preliminary Examination.

Students are required to successfully pass a Preliminary Examination during their 2nd year in the program in order to reach PhD candidacy. The Preliminary Examination consists of both a written proposal and an oral defense of the proposal. Please see the graduate program website for more information about the written proposal.

Our program allows students to choose between two proposal topic options for the Preliminary Examination. These options should be discussed in advance with the Major Professor and with the Principal Examiner; the Major Professor must approve the topic.

Proposal Topic Options:

- A topic within your own research area.
- A topic unrelated to the area of your dissertation research.

If a student chooses Option #1, the topic cannot be something that the Major Professor has ever written a proposal on (funded or not) or something the Major Professor is currently planning to write a proposal on. While the topic may be within a student's own research area, if they choose, the proposed project must be the student's own ideas and work, not from the Major Professor.

It should be noted that, regardless of the topic, the expectations for performance will be similar. However, the Examination Committee is likely to be less forgiving about the depth of a student's background knowledge when the topic is in the area of their dissertation research. Additionally, the proposal must reflect the student's own scientific creativity. Whichever format is chosen, students should design approaches that are expected to provide significant advances to the field and should be prepared to discuss further approaches beyond the immediate scope of the proposal. Thoughtfulness and innovation are highly desirable qualities in a research proposal.

The main goal of the Preliminary Examination is to test the candidate's ability to defend a research project and their critical and independent thinking. While the examination will typically focus primarily on the proposal topic, the student's understanding of basic and foundational knowledge within the research area may also be evaluated.

Timeline and Deadlines:

- The Preliminary Examination must be conducted no later than the end of the student's 4th academic semester (Fall/Spring). If not completed within this timeline, the student will automatically receive a failing grade, unless the student has received prior approval for an extension from the graduate chair.
- If the student passes their Preliminary Examination, they will officially be a PhD candidate and will continue their dissertation research towards graduation.
- If a student fails their first attempt at the Preliminary Examination, they should plan to retake it the following semester (cannot be within the same semester); ideally within 6 weeks of the initial failure, but contingent on the committee's recommendations.
- A student that fails the Preliminary Examination a second time will be dismissed from the graduate program.

The committee for the Preliminary Examination will consist of all members of the Advisory Committee except for the Major Professor, who will be replaced. The convener of each research area is responsible for assigning the Principal Examiner for each preliminary examination for students in their area. This Principal Examiner will also serve as the replacement for the Major Professor, and will serve as the Chair of the Examination Committee. Once the student is informed of the replacement, the student will complete the Graduate School form 8 in myPurdue to update the composition of Examination Committee using Form 8 in myPurdue four (4) weeks before the examination.

The student should consult with the Principal Examiner at least 2 months prior to the preliminary examination to determine what will be expected.

The role of the Principal Examiner will be to preside over the Preliminary Examination and will be primarily responsible for the format of the meeting and for filing the written comments from the committee members to the Biological Sciences Graduate Office and Graduate School. The Principal Examiner should establish, in advance, guidelines for the length and nature of the student's presentation, the length and scope of the question and answer period, and any other procedures. If a recording has been requested by the Major

Professor, coordinate with Roger Mahrling to record the Preliminary Examination to share at a later date. Once completed, the Principal Examiner will need to log into the Graduate Student Database to complete the post-examination results form. Once the form is completed by the Principal Examiner, the rest of the committee can then submit their required approvals of the examination outcome.

A student that takes and fails the Preliminary Examination, and a student that misses the deadline for the Preliminary Examination (last day of classes for the semester) and receives an automatic failure, will have the option for a second attempt. Contingent on the Examination Committee's recommendations and availability, the student should retake the exam within 6-weeks of the initial failure. It is highly recommended that the student schedule a meeting with the Principal Examiner immediately to review the results of the first attempt, devise a plan for any requested changes, and discuss a plan for a better performance during the second attempt.

If a student fails the second attempt, the student will be dismissed from the PhD program. Optionally, the student may request to participate in the MS program, with approval from the Chair of Graduate Programs.

9. Annual Committee Meetings

The Major Professor will preside over the annual committee meetings and will be responsible for filing the summary evaluation form and individual comments from the committee members to the Graduate Office. It is the student's responsibility to schedule their annual committee meetings.

The student should submit their annual report to their advisory committee at least 1 week before the scheduled meeting. A template and more details for the annual report are available on the graduate program website.

For the meeting, the student should prepare ~30 minute presentation that aligns with the annual report, yet with more details and discussion. The advisory committee will evaluate the student's overall progress in their research and professional training/background, and provide both oral and written comments on the student's progress.

After joining a lab, students must have a committee meeting each year, ideally within the fall semester. Students may receive an automatic 'Fail' grade if not completed each year.

Receiving two failing grades (Fail) for the annual committee meetings may be grounds for expulsion from the graduate program.

10. Research in Absentia.

A doctoral student who has completed the preliminary examination and wishes to leave the University to continue doctoral candidacy should request to register for research in absentia. This is only possible after the preliminary examination is passed, all course work is completed, and at a point where remaining work on research problem and thesis may be completed off campus.

11. Identify yourself as an advanced degree candidate.

Indicate on the course registration through *myPurdue* with the appropriate CAND course. You can add this course only during the first week of each semester/term. Once you are registered, this will count toward the OGSPS count of consecutive candidacy registrations. Three (3) consecutive semesters will result in a \$200 fee on the 3rd semester.

If you need to register as candidate after the first week of each semester/term, you will need to contact the Graduate Office.

12. Dissertation Preparation

PhD students must prepare their dissertation prior to their final examination.

Students are encouraged to review the formatting guidelines and various submission deadlines as outlined on the graduate program website.

The Major Professor is responsible for scanning the dissertation in iThenticate. The Graduate Program Coordinator can assist with this as needed.

13. Final Examination - Planning

At least two terms must elapse and be devoted to research between the Preliminary Examination and the Final Examination.

The Final Examination is taken after completion of the research and writing of the dissertation. The Final Examination (dissertation defense) will be publicly announced on the departmental bulletin boards and by email from the Graduate Office. It will consist of a public seminar (1 hour) where the candidate will summarize their dissertation research. Following the seminar, there will be a closed oral examination (typically 1-2 hours) with the Advisory Committee.

The request to take the Final Examination the online Form 8 needs to be submitted. This must be completed 3 weeks prior to the date of the student's Final Examination.

Three (3) forms must be submitted to acquire Graduate Office approval on Form 8

1. PhD Bulletin
2. BIOL-04A
3. Dissertation signature request form

14. Report on Final Examination

The Advisory Committee is the Final Examination Committee. All Advisory Committee members must sign the online Form 11: Report of the Final Examination. The examination report must be filed for candidates to receive their degrees.

A majority vote is necessary to pass the Final Examination; not more than one dissenting vote is acceptable in certifying the candidate to receive the degree.

If the Advisory Committee decides that the performance on the Final Examination is unsatisfactory, a second examination is required. A new request form, Form 8, must be submitted to the OGSPS.

15. Dissertation Deposit Form & Appointment

Students must deposit the final products of their research with the Purdue University OGSPS Thesis & Dissertation Office. The Thesis & Dissertation Office will help ensure that all pre-requisites for deposit have been fulfilled and that your thesis or dissertation meets the quality standards established by the Graduate Council Standing Committee on Theses and Dissertations.

Prior to submitting, you are encouraged to review the Thesis and Dissertation Policies and Practices website, also linked from the graduate program website.

A detailed list of instructions for submitting your thesis/dissertation can be found on the Deposit Requirements page on the Thesis and Dissertation Office website. If you have further questions, refer to the Thesis/Dissertation Office website or contact their staff directly by email at thesishelp@purdue.edu.

Scheduling an Appointment:

The Thesis & Dissertation Office recommends scheduling a formatting consultation prior to your defense date. This ensures that you will be 100% formatted before you defend, this way, you will only have to focus on content corrections post-defense and can help reduce the number of formatting errors that are typically caught during the deposit process.

Formatting consultations are cut off 2 weeks prior to the CAND 99100 registration deadline due to increased staff workload.

To schedule a consultation appointment, see their Request a Consultation page.

Important deadlines can be found on the OGSPS website.

16. Commencement Exercises

Commencement information can be found on the graduate program website.

17. Diplomas

Students who attend the commencement will receive their diplomas at the graduation ceremony. Diplomas for all candidates who do not attend commencement will be mailed to the graduate's "Diploma" address and/or "Permanent" address approximately four to six weeks after the ceremony. To ensure the correct mailing address for your diploma, please indicate your diploma address on the Graduation Tab under Diploma Mailing Address.

18. Degree Certification Statement

Individuals who have satisfied all of the requirements for their degree and need documentation of that fact (as is the case for some post-doctoral appointments) prior to when the degree will be awarded, may obtain such a statement from the OGSPS.

Students failing to meet any of the academic graduation requirements by the last day of the session will not graduate and must register in a later session.

Failure to meet deadlines will result in non-approval of registration for subsequent sessions. All University fees are subject to change without notice.