

**Indiana University-Purdue University  
Indianapolis**



**BIOLOGY DEPARTMENT  
GRADUATE STUDENT HANDBOOK**

## WELCOME

Welcome to the IUPUI Biology Department Graduate Program. The department offers thesis and non-thesis Master of Science (M.S.) degrees and a Doctor of Philosophy (Ph.D.) degree from Purdue University. This handbook is designed to give an overview of the more important policies, expectations, and responsibilities of graduate students in the Biology Department and covers topics such as course and academic performance requirements, required forms, deadlines for filing forms, financial aid, and important university contacts.

IUPUI is a mix of many schools that programmatically confer IU or Purdue degrees. Your graduate program in the Department of Biology is administered according to the guidelines established by the Purdue Graduate School and the Department of Biology at IUPUI. Indiana University has the administrative and fiscal responsibilities for the IUPUI campus, and so will handle your academic records, fees, and compensation.

We have made every effort to ensure the accuracy of the content of this handbook; however, programs and policies will change in response to a variety of factors. Please contact the Director of Graduate Studies (Dr. Nicolas Berbari (Thesis) or Dr. James Marrs (Non-Thesis)), the Biology Department Chair (Dr. Ted Cummins), or the Graduate Program Coordinator/Assistant to the Chair (Mrs. Laura Flak) in the Departmental office if you have questions regarding policies or procedures.

Best wishes for your graduate career in the Biology Department. We hope that we meet your expectations.

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### Doctor of Philosophy checklist

Description of activity	Date to be completed Semester 1	Notes	Date Completed
Select Major Professor	Following 3 Research Rotations or prior to arrival		
Fulfill Graduate English Proficiency (if required)	December 31 <sup>st</sup> . Needs to be completed prior to being able to TA.	SPEAK exam info 317-274-2188	
Register for 3-credit graduate course Register for 3-credit hour Research Bootcamp (60900) course - Required Register for 1-credit hour seminar course 59500 Register for Research Credits 69900	Prior to registration deadline	Register for a total of 6-9 total credit hours per semester (Total should be 15-18 credits per year, including summer if applicable) including courses and research credits.	
Get TA assignment	By early August	Depends on funding source and TA responsibilities	

### Semester 2

Register for 3-credit graduate course (if applicable)	Prior to registration deadline		
Register for Research Credits 69900 Register for 1-credit hour seminar course 59500	Prior to registration deadline	Total 6-9 credit hours including courses, at least 1 credit of dissertation research	
Establish Graduate Advisory Committee	The Committee will evaluate the student Review in Semester 3.	At least 4 members required. Advisor, 1 outside department, 1 or more Biology. More than 50% of the faculty must be from Biology.	
Write Review Article	During the second semester and over the summer after the 1 <sup>st</sup> year, the student will write a Review article.	The review article is the student's own work and will be used to establish a knowledge base of the literature in their area of research.	

### Semester 3

Register for 3-credit graduate course (if applicable) Register for Research Credits 69900	Prior to registration deadline	Register for a total of 6-9 total credit hours per semester including courses and research credits.	
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<b>Register for 1-credit hour seminar course 59500</b>			
<b>Defend Review Article</b>	<b>The FIRST committee meeting will be a defense of the student's review article. Also go over the proposed Plan of Study with the committee.</b>	<b>The student will schedule their first committee meeting to take place between September and November.</b>	
<b>Draft Plan of Study</b>	<b>As soon as possible after the FIRST committee meeting.</b>	<b>Draft and Submit the Electronic Plan of Study (ePOS). Contact Mrs. Flak for help with drafting the ePOS. <a href="https://mypurdue.purdue.edu/">https://mypurdue.purdue.edu/</a></b>	

#### Semester 4

<b>Register for 3-credit graduate course Register for Research Credits 69900 Register for 1-credit hour seminar course 59500</b>	<b>Prior to registration deadline</b>	<b>Register for a total of 6-9 total credit hours per semester including courses and research credits.</b>	
<b>Submit "Request for Appointment of Examining Committee" Form GS-8. Consult with Exam chairperson about expectations</b>	<b>At least 4 Weeks Before Preliminary exam</b>	<b>Provide exam time, date, location to Mrs. Flak at this time so that she can approve form electronically.</b>	
<b>Submit written report (grant, proposal, prospectus etc.) for proposed research project</b>	<b>At least 2 weeks before the meeting.</b>	<b>Ensure enough time for you and advisor to review document prior to submitting to committee</b>	
<b>Preliminary Examination</b>	<b>At least 6 months after, but within one year of passing the FIRST Committee meeting</b>	<b>Alert Mrs. Flak of results of the Preliminary examination and she will file GS-form 10 electronically for the committee.</b>	

#### Subsequent Semesters

<b>Register for 3-credit graduate course (as recommended by GAC) Register for Research Credits 69900 Register for 1-credit hour Friday seminar course 59500 Register for 69600 student seminar course</b>	<b>Prior to registration deadline</b>	<b>Register for a total of 6-9 total credit hours per semester including courses and research credits (69900). Register for courses based on Plan of Study and Graduate Advisory Committee recommendations. Must register for at least two 69600 during Ph.D.</b>	
<b>Dissertation Committee Meetings</b>	<b>As recommended by committee, but at least twice a</b>	<b>Fill out GR4 and GS4 forms and send to Mrs. Flak.</b>	

	year (E.g. one by end of July and one by end of December)		
Check on credit hours and POS	Each Fall and Spring	Check with the DGS (Dr. Berbari) and Mrs. Flak to ensure that your POS is appropriate and that the credits you have (or have transferred in) are recorded appropriately.	

**Final Semester**

File for Candidacy	Prior to registration deadline	Register for CAND99100	
Register for Seminar (For dissertation presentation)	Prior to Registration deadline	69600 registration for seminar	
Register for Research Credits	Prior to Registration deadline	Total 8 credit hours including courses, at least 1 credit of thesis research (69900)	
Submit Dissertation to Advisory/Examination Committee	At least 2 weeks prior to defense date	Ensure enough time for you and advisor to review document prior to submitting to committee	
Submit "Request for Appointment of Examining Committee" Form GS-8	At least 4 Weeks Before Final Examination	Provide exam time, date, location to Instructional coordinator (Mrs. Flak) at this time so that she can submit form electronically.	
Final Examination	Public seminar and private defense		
Dissertation Defense Final Exam and additional forms	Following Successful Defense	Grad school forms 9 (Thesis Acceptance), 15 (optional - confidentiality), 30 (Cover page), and 32 (Agreement/Pub delay/Copyright). <a href="http://www.purdue.edu/gradschool/research/thesis/required-forms.html">http://www.purdue.edu/gradschool/research/thesis/required-forms.html</a>	
Submit Final Dissertation	End of Semester	IUPUI graduate office Electronic Thesis Deposit Site ( <a href="http://dissertations.umi.com/purdue/">http://dissertations.umi.com/purdue/</a> ) - submit bound copy to department.	
Complete Post Ph.D. information	End of Semester		
Complete NSF Survey on Earned Doctorates	Prior to leaving	<a href="https://sed.norc.org/showRegister.do">https://sed.norc.org/showRegister.do</a>	

**Thesis Master's checklist for May graduation**

<b>Description of activity</b>	<b>Date to be completed</b>	<b>Notes</b>	<b>Date Completed</b>
<b>Semester 1</b>			
<b>Select Major Professor</b>	<b>Prior to arrival</b>		
<b>Fulfill Graduate English Proficiency (if required)</b>	<b>December 31<sup>st</sup></b>	<b>SPEAK exam info 317-274-2188.</b>	
<b>Register for 3-credit graduate course</b>	<b>Prior to registration deadline</b>	<b>Must take at least 3 courses over 4 semesters, usually in semesters 1-3.</b>	
<b>Register for Biol Bootcamp course (60900) - Recommended</b>	<b>Prior to registration deadline</b>	<b>3-credit hour course in first semester. Cannot be used for the required 3 didactic courses.</b>	
<b>Register for Research Credits (69800)</b>	<b>Prior to registration deadline</b>	<b>Register for a total of 6-9 total credit hours per semester (Total should be 15-18 credits per year, including summer if applicable) including courses and research credits (69800). 30 Total Credit hours required.</b>	
<b>Get TA assignment</b>	<b>Early August</b>	<b>Depends on funding source/desire to TA.</b>	

**Semester 2**

<b>Register for 3-credit graduate course</b>	<b>Prior to registration deadline</b>	<b>Need to take 3 courses over 4 semesters, usually in semesters 1-3.</b>	
<b>Register for Research Credits (69800)</b>	<b>Prior to registration deadline</b>	<b>Total 6-9 credit hours including courses, at least 1 credit of thesis research (69800).</b>	
<b>Establish Graduate Advisory Committee</b>	<b>May 31<sup>st</sup></b>	<b>At least three members, major professor and at least one other in Biology. 50%+1 have to be from Biology.</b>	
<b>Draft plan of study</b>	<b>Have committee evaluate in person or by e-mail</b>		
<b>File electronic Plan of Study</b>	<b>By May 1st</b>	<b>Submit electronic plan of study (ePOS).</b>	
<b>Have 1st Committee Meeting</b>	<b>By end of summer</b>	<b>Required prior to filing plan of study.</b>	

**Semester 3**

<b>Register for 3-credit graduate course</b>	<b>Prior to registration deadline</b>	<b>Need to take 3 (3 credit hour) courses over 4 semesters, usually in semesters 1-3 (excludes 60900).</b>	
<b>Register for Research Credits (69800)</b>	<b>Prior to registration deadline</b>	<b>Total 6-9 credit hours including courses, at least 1 credit of thesis research (69800).</b>	

**Semester 4 or graduating semester**

<b>File for Candidacy</b>	<b>Prior to registration deadline</b>	<b>Register for CAND99100.</b>	
<b>Register for Seminar (69600)</b>	<b>Prior to registration deadline</b>	<b>69600 registration</b>	
<b>Register for Research Credits</b>	<b>Prior to registration deadline</b>	<b>Total 6-9 credit hours including courses, at least 1 credit of thesis research (69800). May require less depending on credits taken during first 3 semesters and summers.</b>	
<b>Have 2nd Committee Meeting</b>	<b>January 31<sup>st</sup></b>		
<b>Thesis Format Pre-check Workshop</b>	<b>Late January or Mid-February</b>	<b>Dates TBA - Grad Office sends reminder</b>	
<b>Submit "Request for Appointment of Examining Committee" Form GS-8</b>	<b>At least 3 weeks before defense</b>	<b>Provide exam time, date, location to Mrs. Flak at least 4 weeks prior to meeting. She will submit form electronically.</b>	
<b>Copies of Thesis to Committee</b>	<b>AT LEAST 2 weeks Before Defense</b>	<b>Should be given to mentor at least 2 weeks before date due to committee.</b>	
<b>Thesis presentation and Defense</b>	<b>March 31<sup>st</sup></b>	<b>To give sufficient time to make corrections and have format review</b>	
<b>Thesis Format Review</b>	<b>Middle of April</b>	<b>At least two reviews are required</b>	
<b>File GS-8 form "Report of Master's Examining Committee"</b>	<b>Late April</b>	<b>Provide exam time, date, location to Instructional coordinator (Mrs. Flak) at least 2 weeks prior to meeting. She will submit form electronically.</b>	

For electronic filings, access the Purdue Graduate Student Database (GSDB). Faculty and students use the GSDB to sign, review, and approve forms. Faculty can access the GSDB can be found at [https://ias.itap.purdue.edu/rqs/wpu\\_intra.pu\\_dispath](https://ias.itap.purdue.edu/rqs/wpu_intra.pu_dispath). Students, please see the Instructional Coordinator for GSDB access <https://mypurdue.purdue.edu/>.



## **DOCTOR OF PHILOSOPHY**

### **Program Overview**

**Objective of Study for the Ph.D. Degree** - The Doctor of Philosophy (Ph.D.) degree is the highest degree conferred by Purdue University. This doctoral degree is restricted to those scholars who have demonstrated superior ability in a recognized academic discipline. The Ph.D. program must be rationally related, highly research-oriented, and culminate in a dissertation of scholarly merit indicative of the candidate's ability to conduct original research in a recognized field of specialization. Professors who work in close association with selected graduate students direct the individual's Ph.D. program. In practice, doctoral programs are composed of 1) formal and informal studies culminating in a Review article that is written and evaluated at the beginning of the second year; 2) guided individual study in a chosen field or discipline culminating in a grant proposal style document that is evaluated in a preliminary examination at the end of the second year; 3) original research that describes a novel body of work and terminates in a successfully defended dissertation. Individuals pursuing a Ph.D. dissertation may receive a stipend in the amount of \$27,500 per year (2020-2021 levels; See Financial Assistance Section)

**Coursework** - Ninety credit hours of registration are required for the Ph.D. degree. There is no minimum number of standard subject courses; however, both the major professor and the graduate advisory committee (see below) will advise the student on required coursework.

In addition to standard subject courses, Ph.D. students are required to enroll in the Research Bootcamp Course (Biol 60900) in the fall of their first year. This course covers an introduction to programs used in multiple research laboratories (e.g. Prism, Photoshop, and Illustrator) as well as presentation skills and responsible conduct in research.

In addition to the above coursework, students must present at least two times during the course of their studies. The semesters in which students present, they must register for a 1-credit hour student seminar (69600). Therefore, in total, students must have two registrations for 69600 in addition to a registration for 69600 in the semester in which they present their final dissertation seminar. These presentations may be a research in progress, an overview of the field/research question presentation, or a journal club-style presentation. The student should consult their major professor when choosing a topic and format for their presentation. At least one presentation must be outside of the student's direct area of research.

Students must attend the weekly biology seminars. To assure attendance, students must register for 59500 (Biology Seminar) for 1-credit hour. This course will be graded and there will be a virtual sign in for seminar attendance (TopHat). Students who miss more than 3 seminars will be docked ½ of a letter grade for each additional absence. Given that some students work outside of the department (e.g. L-Grad) or may have professional commitments that preclude them from attending the Friday seminars (e.g. TA assignments), seminars outside of the Biology department may be counted towards seminar attendance. Documentation of this must be supplied to the major professor. At least 10 seminars in a semester must be attended and documented for a grade of A. All communication must be made prior to finals week in order for the 59500 course director to assemble student grades.

Students are invited to suggest names of scientists to include in the seminar series, and at least one seminar slot per year will be reserved for student invited speakers. Nominations are made by the Biology Graduate Student Club, with the Seminar Committee having final approval.

**Teaching** - To enhance academic training, doctoral students are strongly encouraged to obtain teaching experience during their graduate studies (e.g. as a teacher's assistant; TA). Student's supported by department funds are generally required to TA as a part of their financial assistance (see below). Student's must TA at least 1 semester during their training.

## **Major Professor, Graduate Advisory Committee, Plan of Study**

Major professor - The major professor (also sometimes referred to as research advisor or principal investigator (PI)) will direct the student's dissertation research and, along with the graduate advisory committee (GAC), will play a principle role in determining the student's course of study. Students can enter the Ph.D. program either having chosen a dissertation advisor or can choose to do a series of laboratory rotations in her/his first semester to become acquainted with various research possibilities. .

Graduate Advisory Committee (GAC) - The chair of the committee, who may be the major professor, must be from the IUPUI Biology Department. At least one individual must be from outside the Biology Department of IUPUI. The committee must be made up of AT LEAST 4 individuals and >50% of the committee members must be from the IUPUI Biology Department.

The GAC is constituted by mutual consent of the student, major advisor, and committee members. The student requests appointment of the GAC in their second semester. The GAC will be responsible for evaluating the student's review at the First Committee Meeting (see below).

Plan of Study - The Electronic Plan of Study (ePOS) form lists course work and language requirements. The major professor initially recommends an acceptable plan of study. The ePOS must be agreed upon by the GAC and a meeting of the GAC to discuss the ePOS is useful, but not required. The ePOS must be approved before the request for the Preliminary Examination will be approved. The ePOS is submitted electronically and is initiated by the student in order to track student progress. Mrs. Flak may help with the ePOS. This can be done any time prior to the meeting; however, it is preferred that this form is submitted AT LEAST 5 weeks in advance of the Preliminary Examination. To file ePOS, login to your account at <https://mypurdue.purdue.edu/>. Special note on transferring credit from MS Thesis. Some students may request transferring of credits from a completed master's (MS) Thesis. Up to 30 credit hours may be transferred from a **COMPLETED** MS Thesis, including research credit hours. If an MS Thesis was started at IUPUI, but **not completed**, research credit hours performed for the MS Thesis (69800) **CANNOT** be transferred to the Ph.D.

## **Examinations/Milestones**

### **First year review**

Timing - The student should begin working on a review article at the beginning of their second semester. This review article will form the basis of the initial evaluation of the student by the student's GAC during the Fall semester of their second year (see below).

Purpose - This critical review will detail a problem/knowledge gap in their area of research, along with an assessment of this literature to propose a specific answer to this problem. The goal of this review is two-fold. 1) Require that the student delve into the research literature to explore the gaps in knowledge that their project will be addressing. 2) Explore the student's basic biology knowledge by asking specific questions linked to their review. A strong critical review will include pointing out which conclusions are well-established, and which are not when there are discrepancies in the literature. While the review is the work of the student, the student's research mentor can help the student identify the gap and prepare the document.

Format - The format of the review will be in a Nature Reviews (<https://www.nature.com/siteindex#journals-N>) format. There are many different Nature Reviews journals, so look at ones that may be more relevant to your field to get an idea of formatting (e.g. virology <https://www.nature.com/articles/s41579-019-0249-7>). In addition, here is a link to a qualifying critical review by an IUPUI student from Psychology (<https://onlinelibrary.wiley.com/doi/full/10.1002/mgg3.334>) that can also provide insight. There should be an abstract and main text (subdivided into rational headings). An introduction can precede the main text if desired.

## First committee meeting requirements

The first committee meeting will have additional requirements compared to subsequent committee meetings as this committee meeting will utilize the critical review as an initial point of discussion.

For this first committee meeting, the student will prepare a presentation to recap the review for the committee. In addition, they may incorporate some of their preliminary data from the laboratory either linked to, or separate from, the review.

As with other committee meetings, the committee will vote to pass or fail. If the student fails the committee meeting, the student will have to re-write the critical review and pass a committee meeting prior to taking the preliminary examination. The preliminary examination should be taken at least 6 months and no more than 1 year after successful completion of the first committee meeting.

The first committee meeting attempt must be completed prior to the end of the Fall semester of the second year.

Preliminary Examination - The student is required to take their preliminary examination at least within one year of their first committee meeting. The student submits the ePOS at least 5 weeks prior to the preliminary examination. This submission is required to be approved prior to submission of form GS-8 "Request for Appointment of Examining Committee". Subsequently, the student submits form GS-8 "Request for Examining Committee" at least 4 weeks prior to the Preliminary Examination. In addition, the student informs the Graduate Program Coordinator (Mrs. Flak) of the ePOS and the GS-8 form have been submitted so that she is aware of the upcoming examination. These forms are submitted via the student's Purdue Portal <https://mypurdue.purdue.edu/>. This examination requires a proposal to be written by the student in consultation with their major professor. The student is encouraged to write this proposal in a style consistent with grant submissions for the laboratory that the student is in (e.g. NIH NRSA format, NSF Graduate Research Fellowship, NIJ Graduate Research Fellowship) but the student may submit an examination in another format that is approved by the major professor. This grant is to be sent to the student's Preliminary Examination Committee at least **two weeks** before the Preliminary Examination. The student may get feedback from the major professor or other colleagues; however, this is the student's own work which will become obvious during the oral examination. The oral examination is both a defense of the student's grant proposal and a test of the student's knowledge of areas germane to the grant proposal and the student's research. The results of the examining committee are reported to the Graduate School with an appropriate recommendation for: 1) the student's admission to candidacy; 2) continued preparatory study; or 3) discontinuation. If a student does not pass the preliminary examination, a second meeting must be convened within 6 months. Should the preliminary examinations be failed twice, the student may not be given a third examination, except upon the recommendation of the examining committee and with special approval by the Dean of the Graduate School. After admission to candidacy, the candidate must devote at least 2 (but generally 4-6) semesters to research before the final examination (thesis defense).

Committee meeting guidelines - Committee meetings are held with the GAC at least twice a year (usually one by end of July in the Summer and one by end of December in the Winter) and do not require notification except of the committee members. The GAC may request meetings more often than this time frame. Form BIOL-GS-4 (obtained from the Graduate Program Coordinator, Mrs Flak or the Director of Thesis Graduate Studies, Dr. Berbari) should be completed prior to the committee meeting by the student, and discussed at the committee meeting. In addition, the GR-4 form should be signed by the committee. Both forms should be scanned and e-mailed to the Graduate Program Coordinator shortly following the meeting for our records. These forms are meant to track student progress.

Students must prepare a report of their work since the last meeting for the committee. This report will recap what was discussed at the previous meeting and detail progress since then. What to do in these reports and for the committee meeting is listed below. These reports will be submitted at least one week prior to the meeting. These reports should be prepared in consultation with the major

professor.

Sample of what should be included for the progress report. This report is up to 5 pages, exclusive of figures. (Adapted from [https://www.bio.purdue.edu/Academic/graduate/phd/forms/PHD RC Expectations.pdf](https://www.bio.purdue.edu/Academic/graduate/phd/forms/PHD_RC_Expectations.pdf)).

- A. Overall goal of meeting: progress report (which includes activities since the previous meeting and plans for activities until the next meeting).
- B. Main Document:
  1. A brief (one paragraph synopsis of overall study and goals)
  2. Data in form of graphs and tables of major findings since the previous meeting.
  3. Enough text to explain figures and tables.
  4. Expanded coverage of any experiments, experimental designs, hypotheses to be tested, types of data to be collected, rationale etc. for research until the next meeting if not already covered in preliminary proposal; that is, if there is a change in research direction; if material is already in preliminary proposal, then a brief synopsis with a reference to pages in prelim proposal will be sufficient.
  5. Information on research-related activities (e.g., grants applied for or obtained, papers submitted, soon to be submitted, or published, presentations given, honors and awards received).
  6. A time line for major sections of the research project that can show, at a glance, where the student is in terms of fulfilling research goals.
  7. A timetable for the next year.
- C. The student should prepare a presentation complete with figures etc., which focuses on what was accomplished since last meeting and what research is planned until the next meeting.

### **Declaring Candidacy**

Declaring Candidacy - In the final semester of registration, the degree candidate must register for candidacy (Course# CAND 99100, 0 credit hours) in addition to the regular registration. If for some reason the dissertation is not completed during this semester, the student may register for only CAND 99100 in the following semester, provided that the student was registered for at least one credit hour of research in the previous semester (summer excluded). The student must then meet the mid-semester deadline for passing the final examination and submitting the dissertation. If the student does not meet this deadline, the registration for candidacy will be converted to 1 hour of research credit. The student can graduate that semester by fulfilling the later deadlines for the final exam and dissertation deposit. If the later deadlines are not met, the student must *again register for candidacy* for the next semester.

### **Doctoral Dissertation**

Writing and Formatting the Dissertation - The research accomplished as part of the doctoral work is expected to make a significant contribution to the candidate's chosen field of knowledge. The candidate must demonstrate a novel body of work that makes a significant contribution to the field. Publications or other forms of documentation of this contribution may evidence this contribution. The candidate will prepare a dissertation showing the results of his/her research and how these results advance the candidate's field of study. When ready to begin serious construction of the dissertation, the student should consult style manuals (available electronically or in paper form from the IUPUI library), other well-written dissertations, and A Manual for the Preparation of Graduate Theses (<https://www.physics.purdue.edu/docs/resources/graduate-thesis-manual.pdf>). In addition, a formatting workshop must be attended that will cover formatting and other guidelines. Here is the link to a recent slide show for this workshop (<http://graduate.iupui.edu/doc/theses-dissertations/purdue-thesis-dissertation-formatting.pdf>). For additional information see (<http://graduate.iupui.edu/theses-dissertations/formatting/index.shtml>). The major professor aids in the generation of the doctoral dissertation and generation of the dissertation is done with input from the major professor. This takes

time and an initial draft of the dissertation should be given to the major professor well in advance of submitting it to the GAC. Once a final, polished version of the dissertation is produced, copies are distributed to the Examining Committee (usually the same faculty as the Graduate Advisory Committee) at least 2 weeks before the scheduled defense date. The format of the dissertation is given final approval when the dissertation is deposited (by appointment) at the IUPUI Graduate School.

Defending the Dissertation - At least two terms must elapse and be devoted to research between preliminary and the final examination. This is a minimum based on the graduate school; however, the dissertation is a complete body of work and therefore will most likely require more time than that, and one's readiness to defend the dissertation will be based on the recommendation of the major professor and the GAC. After the research has been completed and the dissertation written, the candidate shall be given a final examination (dissertation defense) in which he or she defends the dissertation and demonstrates to the Examining Committee the requisite knowledge for which the Doctor of Philosophy degree is awarded. The dissertation defense will be publicly announced on departmental bulletin boards, web sites, and via e-mail. One month prior to the public defense, time and location information (zoom-link and/or room location) must be sent to the Graduate Program Coordinator. It will consist of a seminar, open to the public, during which the candidate will summarize his or her dissertation research. Following the seminar, there will be an oral examination to be attended only by the Examining Committee Members. There are two deadlines for the final exam/dissertation defense, a mid-semester deadline when the student is registered for candidate only and a second deadline (first week in December, third week in April, and third week in July) for students whose registration includes research credits. The end-of-semester deadline for thesis deposit (see below) is different from the exam deadline. Students are strongly urged to allow adequate time between their dissertation defense dates and the deadline for final dissertation submission to allow for revisions required by the Examining Committee. A completed Request for Appointment of Examining Committee must be received at least three weeks before the proposed dissertation defense date. Please see <https://www.purdue.edu/gradschool/about/calendar/deadlines.html> for a calendar of deadlines.

Report of Final Examination - Following the dissertation defense, the major professor and all Examining Committee members must electronically complete Report of the Final Examination via the graduate student database (GSDB). Faculty must obtain access to the GSDB. Not more than one dissenting vote is acceptable in certifying the candidate to receive the degree. If the Examining Committee decides the examination is unsatisfactory, a second examination is required. At least one semester must intervene before the second examination. A new request (G.S. form 8) must be electronically submitted to the Graduate School. If a student does not pass a second examination, then they may elect to obtain a Non-thesis Master's if they have completed the required 30 credit hours (from courses) for this degree. Otherwise, they may possibly enroll in a Thesis Master's program, but this will require approval of the GAC and may require additional coursework to be completed, based on the GACs recommendations.

Final Dissertation Submission - The forms required are listed in Table 1 - Doctor of Philosophy Checklist. In addition to these forms, the student must make a deposit appointment with the Graduate school. Take Form 9 and 32 to the Deposit appointment. Once approved, submit dissertation via the ProQuest electronic thesis deposit (ETD) site <http://dissertations.umi.com/purdue/>.

Leave of Absence, time for graduation, and Course Validity - All leaves of absence should be discussed with and approved by the Program Director/Chair of the department (Dr. Ted Cummins). A student who leaves a program for more than one semester must additionally fill out the Leave of Absence form and submit the form to the School Recorder. A student who does not follow this protocol will be discontinued from their program and must reapply. Ph.D. students may take no more than seven (7) years of training to finish their degree. If a leave occurs during training, students must re-take

courses that were taken more than 10 years previously. Exceptions to these guidelines may be obtained by majority vote of the student's GAC. If a student takes a leave, s/he must also alert the Graduate Program Coordinator so that she can administratively withdraw a student. Additional parties (e.g. Purdue and IUPUI graduate schools) may also need to be informed.

## **THESIS MASTER'S DEGREE PROGRAM**

### **Background Coursework**

Background - This research-intensive thesis master's is open to exemplary students who are interested in pursuing a research career. In particular, this program is designed for individuals whose career goals are to pursue employment in industrial, academic, or government research setting or to pursue a future Ph.D. degree in a biological science. Individuals pursuing a Master's thesis will receive a stipend in the amount of \$22,000 per year (2020-21 levels). This stipend may come from different sources (See Financial Assistance) and may be raised periodically.

Coursework and research requirements - A minimum of 9 Credit Hours of 500-600 level coursework is required. This excludes BIOL59500, BIOL60900, BIOL69600, and BIOL69800. In addition to standard subject courses, Thesis Master's students are **encouraged** to enroll in the 60900 Research Bootcamp Course (60900) in the fall of their first year. They are required to enroll in the 59500 seminar course each semester. Additional courses are chosen in consultation with student's Faculty Advisor with input from the student's Graduate Advisory Committee. In addition, 1 hour of seminar (BIOL69600) will be required during the semester in which the student defends her/his thesis. Also, students will register for Thesis Research (BIOL69800) each semester to obtain a total of at least 30 credit hours across all four semesters. These credit hours should be broken down as follows. In the first year, 6 credit hours each in the fall and spring semesters and 3 credit hours in the summer semester. For year two 6 credit hours in the fall semester and either 9 credit hours in the spring (if graduating that semester) or 6 credit hours in the spring and 1-3 credit hours in the summer (depending on graduation date). Additional, relevant graduate or undergraduate level courses may be required depending on the background of the student and the research area. Intensive research is conducted and Master's students should expect to spend at least 2 years to complete this program, although additional time may be required. Students are encouraged to present findings at local and/or national/international meetings. In addition, students are encouraged to publish their findings in peer-reviewed journals.

Teaching - To enhance academic training, thesis master's students are strongly encouraged to obtain teaching experience during their graduate studies (e.g. as a teacher's assistant; TA). Student's supported by department funds are generally required to TA as a part of their financial assistance (see below).

### **Major Professor, Advisory Committee, Committee Meeting**

Choosing a Major Professor and Graduate Advisory Committee - The major professor (also referred to as research advisor) is the person who will serve as mentor during graduate training. Thesis research will be performed under the tutelage of this individual.

In addition to the major professor, a Graduate Advisory Committee (GAC) must be constituted. This committee is composed of the major professor as chairperson and at least two other members of the IUPUI Biology Faculty. An adjunct faculty member or a faculty member from another department may serve on this committee; however, greater than 50% of the committee must be full-time, resident faculty from the Biology Department. The members of this committee should be chosen in consultation with the major professor, and service on the committee is subject to mutual agreement. Committee members should be contacted and the committee formed by the end of the first year and prior to the start of the second year.



Committee Meeting Guidelines - The student will meet with her/his committee no less than 2 times during the program. The first committee meeting should occur before the beginning of the third semester. This meeting will review and approve the ePOS (See Plan of Study Section, below). It is encouraged that the student and committee meet an additional time early in the fourth semester to gauge appropriate progress towards a Thesis defense. For the first meeting, the student will prepare a progress report that outlines initial progress. For the second meeting, the progress report will recap what was discussed at the first meeting and detail progress since then. Both reports will be submitted to the committee members at least 2 weeks prior to the meeting. These reports should be prepared in consultation with the major professor. For the third meeting (Thesis Defense and Examination), the student will submit the thesis to the committee at least two weeks prior to the Defense. The thesis document is a completely polished document that is prepared in collaboration with the major professor (See Thesis Section). The Thesis presentation and defense should occur before March 31<sup>st</sup> for a May graduation. A later date may be chosen for a Summer or Fall graduation date. Please see <https://www.purdue.edu/gradschool/about/calendar/deadlines.html> for a calendar of deadlines.

### **Plan of Study**

Plan of Study - The electronic Plan of Study (ePOS) must be submitted at least one semester before the semester when the degree is conferred. This is submitted electronically in consultation with the Graduate Program Coordinator (Mrs. Flak). The plan of study must be filed by May 1<sup>st</sup> of the students first year. The ePOS includes standard lecture coursework that the student has taken based on interest and recommendations from her/his advisor and the GAC. The student may also obtain input from the GAC on any additional coursework requirements. The plan of study is approved at the first committee meeting. If a minor change in the approved ePOS is required due to a course work substitution or change in GAC membership, a Change in ePOS form should be submitted. If a major change in the approved ePOS is required, such as a new research direction requiring different course work, then a new ePOS should be filed. To file ePOS, login to your account at <https://mypurdue.purdue.edu/>.

### **Declaring Candidacy**

Declaring Candidacy - In the final semester of registration, the degree candidate must register for candidacy (Course# CAND 99100, 0 credit hours) in addition to the regular registration. If for some reason the thesis is not completed during this semester, the student may register for only CAND 99100 in the following semester, provided that the student was registered for at least one credit hour of research in the previous semester (summer excluded). The student must then meet the mid-semester deadline for passing the final examination and submitting the thesis. If the student does not meet this deadline, the registration for candidacy will be converted to 1 hour of research credit. The student can graduate that semester by fulfilling the later deadlines for the final exam and thesis deposit. If the later deadlines are not met, the student must *again register for candidacy* for the next semester.

### **Thesis**

Writing and Formatting a Thesis - The thesis is the culmination of several semesters of work; however, preparation for writing the thesis begins when the research begins. The student should be amassing pertinent literature, analyzing and interpreting data, and contemplating the significance of the research project throughout his/her graduate career in the Department. When ready to begin serious construction of the thesis, the student should consult style manuals (available electronically or in paper form from the IUPUI library), other well-written theses, and A Manual for the Preparation of Graduate Theses available at <https://www.physics.purdue.edu/docs/resources/graduate-thesis-manual.pdf>. The major professor should evaluate initial drafts of the thesis and once an acceptable version is produced, copies are distributed to the Examining Committee (usually the same faculty as the GAC) at least 1 week before the scheduled defense date. Sufficient lead-time should be given for the advisor to

thoroughly review the work prior to submission to the committee. The format of the thesis is given final approval when the thesis is deposited (by appointment) at the IUPUI Graduate School.

Defending the Thesis - When an acceptable version of the thesis has been produced, the student should consult with his/her Examining Committee to establish a date for the thesis defense. There are two deadlines for the final exam/thesis defense, a mid-semester deadline when the student is registered for candidacy only and a second deadline (first week in December, third week in April, and third week in July) for students whose registration includes research credits. The end-of-semester deadline for thesis deposit (see below) is different from the exam deadline. Students are strongly urged to allow adequate time between their thesis defense dates and the deadline for final thesis submission to allow for revisions required by the GAC. The student informs the Graduate Program Coordinator (Mrs. Flak) at least 4 weeks prior the time and location of the defense. This also allows the Graduate Program Coordinator time to assist in filing form 8 "Request for Examining Committee" These forms are submitted at least 3 weeks prior to the Preliminary Examination. The Request for Appointment of Examining Committee contains the names of the Examining Committee, the title of the thesis presentation, and the day, hour and location of the seminar/defense. The thesis defense includes a public presentation (Seminar, BIOL 69600) of the thesis research followed by a thesis defense before the Examining Committee. Following the thesis defense, the Report of the Master's Final Examination form must be completed and submitted to the Director of Graduate Studies and the Graduate Program Coordinator.

Report of Final Examination - Following the thesis defense, the research advisor and all Examining Committee members must electronically complete the Report of the Final Examination via the graduate student database (GSDB). Faculty must obtain access to the GSDB. If the Examining Committee decides the examination is unsatisfactory, a second examination is required. A new request (G.S. form 8) must be submitted to the Graduate School. If a student does not pass a second time they will have the option of obtaining a non-thesis master's (provided they have completed sufficient coursework) or will be asked to terminate the program without a degree.

Final Thesis Submission - The forms required are listed in table 2 - Thesis Master's Checklist. In addition to these forms, the student needs to make a deposit appointment with the Graduate school. Take Form 9 and 32 to the Deposit appointment. Once approved, submit Thesis via the ProQuest electronic thesis deposit (ETD) site <http://dissertations.umi.com/purdue/>. Please see <https://www.purdue.edu/gradschool/about/calendar/deadlines.html> for a calendar of deadlines



## **NON-THESIS MASTER'S PROGRAMS**

### **Background and Coursework**

Background - There are two non-thesis master's program options. The first is the Non-thesis masters and the second is the pre-professional non-thesis masters.

Standard non-thesis masters - This option is available to students whose career goals are best served by a program that exposes the individual to a broad range of biological topics and may include study in other science and non-science disciplines. This coursework-only program consists of a minimum of 30 credits that can be taken over multiple semesters. The program is comprised of at least 21 credit hours of graduate course work (500-600 level) in Biology (primary area). In addition, for students who wish to combine biology training with work in another area as a mechanism to meet career objectives, 9 credits in a secondary, supporting area are permitted. Examples of secondary areas would include, but not be limited to, chemistry, education, forensic science, mathematics, public affairs, business, statistics, law, computer science, and health administration. For those students with no secondary area, standard Non-thesis, all 30 hours will be taken in biology. The program may require 2 credit hours of registration in Special Assignments (59500), involving an independent creative library project and 1 credit hour of registration in Seminar (69600), an oral presentation of the independent project.

Preprofessional Non-thesis masters (PPNT program) - This lecture coursework-only program consists of a minimum of 30 credits that must be taken over two semesters. 6 of these 30 credits can be from 400-level undergraduate courses. This challenging, intense program is open only to those students who meet a high admission standard. This program is available to those students planning careers in medicine, dentistry, veterinary medicine, optometry, law, or other professional fields.

### **Major Professor**

For non-thesis M.S. programs, the major professor will be the IUPUI Biology Department non-Thesis Director of Graduate Studies (Dr. James Marrs). If required, various faculty members will be assigned to non-thesis MS students. If an advisory committee is required, faculty that compose the advisory committee will be chosen based on their expertise fitting areas germane to a student's professed career goals and/or coursework.

### **Final Examinations for Non-thesis Masters**

The Final Examination for the M.S. Non-thesis degree may be oral, written, or a conference of the Committee (Form 7 <https://www.purdue.edu/gradschool/faculty/forms.cfm>). The Request for Appointment of Examining Committee form does not need to be submitted, unless the Examining Committee is different from the Graduate Advisory Committee. Report of Master's Examining Committee (<https://www.purdue.edu/gradschool/faculty/forms.html>) must be completed and submitted to the Graduate Program Director for signing. The report is then submitted to the Graduate School.

## GENERAL INFORMATION

### **Transfer of Credit, English Proficiency**

Transfer of Credit - For individuals who have not completed a master's degree, but have taken graduate biology courses, up to 12 hours of biology graduate coursework credit taken at IUPUI or another accredited, U.S.-based institution under graduate continuing non-degree status may be transferred to the thesis or non-thesis master's options or to the Ph.D. option. Research credits from a non-completed degree cannot be transferred in (e.g. 69800). Students entering the Ph.D. program with a thesis-based master's degree from IUPUI or any accredited, U.S.-based institution can have a maximum of 30 credits (coursework and research (e.g. 69800) counted towards the 90 credit hours required for a Ph.D (this can include traditional coursework and research credit). For the Ph.D. degree, at least one-third of the credits used must be earned on the campus granting the degree. In all cases, only grades of B or better will transfer and all transfer credits accepted are done so at the discretion of the student's GAC and only after one semester of satisfactory work at IUPUI.

English Proficiency - For students whose first language is not English, the application for admission to the university includes the Test of English as a Foreign Language (TOEFL). Teaching assistants (see below) whose first language is not English must have their spoken language proficiency verified with the SPEAK test, administered by the ESL program. Information about the SPEAK test, including sample questions, can be obtained from the ESL office. Students who do not achieve the minimal SPEAK test scores (50 for classroom and laboratory instruction, 40 for duties involving direct student contact but not classroom or laboratory instruction) will be required to take the ITA training course (ENG G020) and then pass the SPEAK test before assuming TA duties.

### **Financial Assistance**

General information - Support for graduate student stipends come from a variety of potential sources. Because of the objective of financial support is to provide the student with the opportunity to devote their full-time effort to course work, teaching, and research, it is expected that recipients will not hold outside employment. The major professor and/or course directors may also be consulted as to the quality of the student's efforts to ensure continued funding. Those students whose research progress or teaching quality is insufficient will be notified; if, at the end of the following semester, sufficient progress has not been made, support will be terminated.

Teaching Assistantships - The Biology Department offers graduate student Teaching Assistantships to qualified full-time M.S. thesis and Ph.D. students to cover the student stipend. These assistantships will cover 100% of tuition costs and healthcare premiums. Students should be prepared to pay associated Bursar fees (<https://bursar.iupui.edu/apps/costestimator.aspx>).

Teaching assistantships are renewable for up to four semesters for M.S. thesis students and ten for Ph.D. students, providing that the recipient is making satisfactory progress toward the degree and is discharging the teaching assignment in a quality, professional manner. Student satisfaction surveys are administered for each section met by the teaching assistant. Also, the course director provides an evaluation.

The Educational Training for Teaching Associates (ETTA) hosts workshops, one-on-one consultations, and has other resources for TAs. In addition, there is a required workshop for TAs at the start of the semester. ETTA (<http://etta.iupui.edu/>) is a great resource for teaching and for those interested they also offer a certificate in college teaching (<http://etta.iupui.edu/Certificate-in-College-Teaching>).

Each semester the responsibilities of a teaching assistant will be ~6-8 contact hours per week in an introductory biology course or an upper level course in which the individual has had experience. Every

attempt will be made to match the course with the individual's background and interests, as well as to maintain a consistent teaching assignment from semester to semester. However, certain situations may arise to make this impractical or impossible. In addition to meeting the laboratory sections the teaching assistant may be required to attend lectures in the first semester; participate in organizational meetings with other assistants and the course director; set up, administer, and grade laboratory exams; and proctor lecture exams. Dr. Patrick Gentry, Lecturer and Academic Coordinator for Lab Instruction, is responsible for assigning TAs

Research Assistantships - Major professors may have research grants that include stipend, and tuition remission for graduate students hired to work on the funded research project. The availability of research assistantships will vary each year among advisors. The awards are not made by the Department but rather are arranged directly with the major professor. Competition for research assistantships will be keen, and each student is encouraged to consult with their major professor as to the likelihood of there being available an assistantship for which they may be eligible. Ph.D. students supported in this manner are strongly encouraged to teach one laboratory section at some time during their appointment, as this activity is considered to be an essential component of graduate training.

University Fellowships - Ph.D. students with outstanding credentials may receive competitive, first year IUPUI Fellowships. Stipends may vary from Department support levels but students are guaranteed the Department stipend as a minimum. Department first year Fellowships may also be available. All first year Fellowships come with fee remission and graduate student health insurance.

Fellowship Application (Ph.D. only) - Because the Ph.D. degree is a research degree, and research must be supported financially, students in the Ph.D. program are strongly encouraged to apply for fellowships, scholarships, or grants to furnish their stipends and support their research. Several awards (e.g., National Science Foundation predoctoral grants, National Institutes of Health NRSA grants, CTSI grants) are aimed at beginning graduate students and thus require that students write these proposals early on in their studies. Information on external funding opportunities is available on IUPUI web pages and one's major professor. If an external fellowship is awarded, or if external funds are used to pay a student's stipend, the stipend level may be greater than \$27,500.

Tax information: While taxes are not taken out for fellowships or Teaching Assistantships, these may be partially or fully taxable income. Contact your tax advisor or consult the IRS for tax information.

### **Student Responsibilities**

Grades - Coursework grades of A, B, or C are acceptable on a Plan of Study for lecture courses. The Graduate Admissions Committee or the Graduate Advisory Committee may stipulate performance above a C in some or all cases.

M.S. Non-thesis and PPNT students are expected to maintain a minimum cumulative GPA of 3.0. Indices below these levels will be marked "low" on the graduate reports. The Dean of the Graduate School, the Graduate Admissions Committee, and the individual's Graduate Advisory Committee will review each student's progress each semester. If a student's overall or coursework GPA falls below 3.0 the student will be placed on "probationary" status. The Graduate Advisory Committee will then meet with the student and formulate a plan to correct the problem. For full-time M.S. thesis students this meeting and the proposed resolution must be addressed immediately upon learning of the low GPA, as this program spans only two years. Should the student fail to return to a satisfactory level of performance, he or she may be asked to discontinue graduate study. Students who do not attain a grade of B or better in an undergraduate course will not receive credit for that course.

Presentations at Scientific Meetings - Public presentation of research results is a necessary part

of graduate training. Several opportunities to attend and present at scientific meetings are provided to both M.S. thesis and Ph.D. students. Attendance and, after the first year, presentation at a minimum of one local meeting is expected for all full-time students. Local meetings include the IUPUI Research Day and the Indiana Academy of Science (held at various institutions throughout the State), as well as regional meetings that individual major professors may suggest for different research areas.

To further the professional development of graduate students, travel funds for full-time students to present their results at major national meetings in their discipline may be available from different sources (e.g. School or University travel awards, Society travel awards). Students are strongly encouraged to apply for travel awards from different sources.

### **Registration**

Courses - Graduate students register online for classes at the same time as undergraduate students. The Schedule of Classes, online in the middle of the fall semester (for spring semester registration) and the spring semester (for fall and summer semester registration), lists the weeks during which registration is available; final registration closes approximately 5 days before the beginning of the semester. If necessary, schedule adjustments (not new registration) may be made during the first week of classes without penalty; schedule adjustment forms are taken to the Registrar's Office during normal business hours. Registration information is printed in the Schedule of Classes. Domestic M.S. thesis students will register for a total of 15 credits/year. International M.S. students will register for a total of 16 credits/year (8 credits/semester). Ph.D. students will register for 18 credits/year and require 90 credits to graduate.

Research, Seminar, Special Assignments - Permission to register for courses requiring authorization (BIOL 59500, 60900, 69600, 69800, 69900) is obtained in the Biology Department office (SL306) and is accomplished online. Without authorization students will be unable to register for these courses.

Candidacy - In the final semester of registration the degree candidate must register for candidacy (CAND 99100, 0 credits) in addition to the usual registration. This alerts the School of Science and the Graduate School to the anticipated graduation of the student. For additional details, see the section on Declaring Candidacy in the Master of Science and Doctor of Philosophy sections.

### **Tuition Remission**

Students eligible for tuition remission must contact the Biology Department's Graduate Program Coordinator at least one week before the semester begins indicating the number of credit hours taken. Some mandatory fees are not covered by the tuition remission award.

### **Student Health Insurance**

Assistantship and Fellowship awards include payment of the student health insurance premium. Enrollment in this plan is automatic for student academic appointees (assistants, fellows) and there is no cost to the student for the health insurance plan. If a student wishes to enroll dependents in this plan, he/she should consult the Academic Affairs website <https://hr.iu.edu/benefits/GA-medical.html> for additional information. Students wishing to waive this insurance coverage should provide proof of other coverage.

### **Keys and KeyCards**

#### **Student ID, Room Access, and Email Accounts**

Students should access [www.jagtag.iupui.edu](http://www.jagtag.iupui.edu) to learn how to obtain their ID cards. Students must

present proof of identification and student status IU ten-digit number to obtain their ID cards. Students should visit <https://itaccounts.iu.edu> to set up their email accounts.

The student ID card is the IUPUI Jagtag. As needed, access to the outside doors of the SL, LD, SELB, or Innovation Hall buildings, research laboratories, common-use and restricted-use areas, and teaching laboratories is issued to students by the Facility Technical Coordinator (Angela Longfellow), upon request from the student's Major Professor.

Access to the animal facility in the School of Science is maintained by the Animal Facility Director (Mr. Chris Konz). Students and their major professor who use animals for research or teaching must contact the Animal Facility Director to set up a training session (see the section on Training Sessions) prior to working with animals the Animal Facility Director coordinates training materials and requests for KeyCards and keys to the animal facility.

### **Photocopying**

The Biology Department has a copy machine in SL306 available for duplicating related to research and teaching needs only. SL306 is not open evenings and weekends, and therefore duplication of materials such as quizzes and handouts should be accomplished between 8:00 AM and 5:00 PM Monday through Friday. Copying for personal use or for course work is not permitted on this copy machine; for personal copying there are pay-per-copy duplicating machines on the second floor in the atrium between the SL and LD buildings and nearby in the IUPUI University Library.

### **Research Training Sessions**

Below are some of the current requirements. Please contact your research advisor and/or the Facility Technical Coordinator for the most up to date information.

Everyone working in the Department of Biology is required to complete safety training provided by the IUPUI Department Environmental Health and Safety (274-2005). This training is provided at no charge to the employee.

The type of training that is required is based on the individual's employment status within the university and the type of work that is being performed for the department.

If the individual is a **paid** employee (meaning that he/she receive a payment from the university at *any point* during his/her time with the university), the following training is required:

- New Employee Safety Orientation (Classroom ONLY)
- Blood-borne Pathogen Training (Classroom ONLY)
- Biological Safety Training (Classroom or Online)
- Laboratory Safety Training for New Employees (Classroom or Online)

If the individual is not a paid employee of the university, such as a student or volunteer, the following training is required:

- Laboratory Safety Training (Classroom ONLY)
- Blood-borne Pathogen Training (Classroom ONLY, yearly online refresher)
- Biological Safety Training (Classroom or Online)

Once this training is completed, the individual will be required to take the following refresher courses each consecutive year if he/she is still working in the department:

- Lab Safety Refresher Training (Online)
- Blood-borne Pathogen Annual Refresher Training (Online)

Please be aware that other training modules are offered and may be required, but it is based upon the nature of the work and possible exposures in the lab. Other training modules to consider are:

- IUPUI Anesthetic Gas Safety
- IBC-NIH Guidelines for IUPUI
- IUPUI Basic Science Research Practices
- IUPUI Formaldehyde Hazard Communication Training
- IUPUI Hydrogen Safety Training
- IUPUI Laboratory Animal Allergy Exposure Control
- IUPUI Shipment of Biological Materials Training (DOT)
- IUPUI Safely Handling Chemical Waste
- IUPUI Safely Handling Hazardous Waste

#### Other areas of specialized training

- Radiation Safety - Students who will use radioisotopes as part of their research project are required to apply for authorization to use radioactive materials from the Radiation Safety Office. Generally the major professor is the permit holder for radionuclide use. Those having no previous experience using radioisotopes must attend a brief orientation session and then a training course (2 hours per day for 1 week), and subsequently pass an examination. Those having previous experience with radioisotopes must attend the orientation session but may forgo the training course if they pass the examination.
- Use of Animals - Students using animals in their research project or teaching assignment must receive training in animal use and regulations. The initial training materials include a CTSI training online session; continuing education may include newsletters, group training sessions, and individual training sessions with the Attending Veterinarian. The director of the animal resource center, Mr. Chris Konz ([ckkonz@iupui.edu](mailto:ckkonz@iupui.edu)), arranges for training materials.
- Human Subjects/IRB

#### To access **E Training**:

- Visit the [One.IU](#) portal and sign in using your username and passphrase.
- Search for E Training.
- Click on the E Training app.
- To choose a course, click on the **Catalog** box to see a complete list of available courses.
- Click on the **University-Wide** folder.
- Click on the **Environmental Health and Safety** folder.
- Click on the **IUPUI & IUPUC** folder.
- From here, you may choose to register for a classroom training or enroll in an online course.

#### For **Online** Courses:

- Click on the **Online Training** folder. You will see the icon of a computer monitor next to each course name.
- Locate the desired **course name**.
- Click the **Enroll** button.
- The Enroll button will change to **Open**. From here you may click on the "**Open**" button to launch the selected course immediately.
- If you do not take the course immediately, it will reside in your **My Courses** area so you may take training when time permits.

- A quiz is associated with each online course. Be sure to complete the quiz after viewing each course. You will not be able to take a quiz until you have completed viewing the course training module. You may access the quiz for each module at the end of the training.

For **Instructor Led Classroom** Courses:

- Click on the **Classroom Training** folder. You will see the list of offered courses.
- Click the **Enroll** button next to the desired course name.
- A listing of all available dates and times will be listed. Click the **Enroll** button for the session of your choice.
- A page will appear confirming your enrollment.
- Once you complete the course, a record of your participation will be kept in the My Transcripts section of E Training. You may print a certification of completion from E Training at any time.

## Certificates

To print a certificate of completion for E Training courses:

- From your E Training dashboard, click on the **My Transcripts** link, where a photograph of a diploma is shown. A list of completed courses will appear. If you do not see the course in question, check your My Courses section to make sure you have completed the course and quiz.
- In the My Transcripts area you will see a list of courses completed and the date of completion. Click on the **course name** to launch the certificate.
- The certificate will launch in a gray and white box. The Print button is located at the bottom of this box. Click **Print** to send to your local printer.

## Shared Equipment and Department Etiquette

Several pieces of equipment are shared by researchers in the Biology Department. There are guidelines for the use of this equipment that should be read and understood before using the equipment. These guidelines are available at the orientation session for new graduate students, from the Facility Technical Coordinator, and at mandatory annual or biannual shared equipment meetings. Note that these guidelines stress that it is better to ask for instructions from the faculty or staff member in charge of the equipment than to use the equipment untrained and unsupervised. Departmental etiquette also stipulates that each person ask permission to use supplies and equipment that is not his or hers, and be fair and courteous with shared departmental materials.

**Important Contacts  
Departmental**

Department Office	
Location	SL306
Telephone	274-0577
FAX	274-2846
E-mail	<a href="mailto:Biograd@iupui.edu">Biograd@iupui.edu</a>
Home Page	<a href="http://www.biology.iupui.edu">www.biology.iupui.edu</a>

Administration, Office, Technical Staff				
Title	Name	Office	Phone	E-mail
Chairperson	Dr. Ted Cummins	SL306B	274-0588	<a href="mailto:trcummin@iu.edu">trcummin@iu.edu</a>
Thesis Director of Graduate Studies	Dr. Berbari	EL208	274-0540	<a href="mailto:nberbari@iu.edu">nberbari@iu.edu</a>
Non-Thesis Director of Graduate Studies	Dr. James Marrs	SL328A	278-0031	<a href="mailto:jmarrs@indiana.edu">jmarrs@indiana.edu</a>
Graduate Program Coordinator/Assistant to the Chair	Mrs. Laura Flak	SL306	274-0580	<a href="mailto:lmflak@iu.edu">lmflak@iu.edu</a>
Financial Specialist	Ms. Annetta Hill	SL306	274-0575	<a href="mailto:anfhill@iupui.edu">anfhill@iupui.edu</a>
Receptionist	Ms. Leslie Santos	SL306	274-0577	<a href="mailto:ledisant@iu.edu">ledisant@iu.edu</a>
Academic Coordinator for Lab Instruction	Dr. Patrick Gentry	SL318	274-8544	<a href="mailto:plgentry@indiana.edu">plgentry@indiana.edu</a>
Facility Technical Coordinator	Ms. Angela Longfellow	SL314	274-0579	<a href="mailto:alongfel@iupui.edu">alongfel@iupui.edu</a>
Director of Lab & Curriculum Support	Mr. Rick Frey	SL333	274-0583	<a href="mailto:rfrey@iupui.edu">rfrey@iupui.edu</a>
Animal Facility Director	Mr. Christopher Konz		274-2870	<a href="mailto:ckkonz@iupui.edu">ckkonz@iupui.edu</a>

**University Contacts**

Information on these units can be accessed from the IUPUI Home Page ([www.iupui.edu](http://www.iupui.edu)) and from the School of Science Home Page ([www.science.iupui.edu](http://www.science.iupui.edu))

University Unit	Phone	Location
Adaptive Educational Services	274-3241	Joseph Taylor Hall (UC-100)
University Bookstore	278-2665	Campus Center (CE)
Bursar	274-2451	Campus Center (CE)
Center for Teaching and learning	274-1300	University Library (UL1125)
Dean's Office School of Science	274-0625	LD222
English for academic purposes	274-2188	Cavanaugh Hall (CA341)
Graduate School, IU	274-4023	UL
Occupational Health Services	274-2274	Coleman Hall and CE
IUPUI Police - Emergency	274-7911	430 N. University Blvd
IUPUI Police - Information	274-0527	430 N. University Blvd
Registrar	274-1519	CE250
Student Council, School of Science	278-2405	LD016
University College	274-5033	Taylor Hall (UC)
University Information Technology Services	<a href="http://uits.iu.edu/">http://uits.iu.edu/</a>	



(UITS)/Support Center		
Writing Center	274-2049	Cavanaugh Hall (CA008H)

### Helpful Websites

Graduate Office - <http://graduate.iupui.edu/>  
 Office of the Bursar - <http://bursar.iupui.edu/>  
 Campus maps - <http://map.iu.edu/iupui/index.php>  
 Jag Tag Services - <http://www.jagtag.iupui.edu/>  
 Libraries - <http://www.iupui.edu/academics/libraries.html>  
 One.iu - <http://one.iu.edu>  
 Parking Services - <http://parking.iupui.edu/>  
 Registrar - <http://registrar.iupui.edu/>  
 Financial aid - <http://www.iupui.edu/~finaid/>  
 Health Services - <http://health.iupui.edu/>  
 Student Affairs- <http://studentaffairs.iupui.edu/>

### Academic Integrity

The Biology Department is involved in training students to be the highly respected professionals that society expects from physicians, dentists, research scientists and other highly esteemed occupations. These fields have always demanded absolute integrity from those who practice these arts. We know that the vast majority of students that come through our classrooms are hard-working and honest, which speaks volumes about their personal integrity. They should be proud of themselves; we are certainly proud of them and proud of those who have come before and honestly succeeded in our program. And students should also know that if it seems to them that there are others who are “getting away” with something, they should rest assured that it is not so. Word spreads very quickly among students and faculty with regard to individuals who do not adhere to the highest ethical standards. We expect that our students will continue to abide by the utmost ethical standards themselves and join us in exposing the misdeeds of others.