# University of Georgia Department of Pharmaceutical and Biomedical Sciences

Doctor of Philosophy (PhD) Graduate Program
Handbook
2023/2024

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# **Preface**

The purpose of the PhD Program Handbook is to provide information concerning the procedures and policies of graduate education within the Department of Pharmaceutical and Biomedical Sciences and the Graduate School of the University of Georgia. It supplements information contained in the <u>Graduate School Bulletin</u> and the UGA Graduate School <u>website</u>. All graduate students are expected to carefully read the policy manual, retain it for future reference, and abide by it in the interest of making graduate study in the department a successful experience.

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# PhD Graduate Program Objectives

The PBS graduate program will provide the academic, research, and administrative resources necessary to meet the program goals:

- Give students breadth of knowledge in modern pharmaceutical and biomedical science disciplines and application to drug discovery and development.
- Give students depth of knowledge and technical training in their area of study.
- Develop a strong work ethic and time management skills in graduate students.
- Train students to conduct research with the highest ethical standards.
- Teach students to think critically and creatively to solve difficult scientific problems.
- Teach students to speak and write about their research clearly and convincingly and successfully compete for external research funding.
- Teach students to critically evaluate their own data and results in the scientific literature.
- Promote a rigorous academic and research environment in which students will add to the current knowledge in their fields.
- Train students to be independent scholars who will make original and important contributions to their fields.

# Program Administration and Contacts

# **Graduate Program Coordinator**

Dr. Jason Zastre
<a href="mailto:jzastre@uga.edu">jzastre@uga.edu</a>
371 Wilson Pharmacy
706-583-0290

# **Graduate Program Officer**

Deborah Martinez, M.Ed. <u>deborah.Martinez@uga.edu</u> 115G Pharmacy South 706-542-7230

# Who do I contact for questions or problems with . . .

- General graduate program issues and concerns, extensions, grievances, and coordinator signatures?
  - > Dr. Jason Zastre, jzastre@uga.edu
- Courses, forms, deadlines, waivers, graduate school requirements, etc.?
  - Deborah Martinez, Deborah.Martinez@uga.edu
- Departmental resources, stipends, room reservations, and items to be forwarded to the department head?
  - > Lynn Smith, lynn.smith1@uga.edu
- Telephones, facility, maintenance, keys and key card access, etc.?
  - ► Brad Brown, <u>btbrown@uga.edu</u>
- Computers and networks?
  - > PBS IT Helpdesk: https://helpdesk.rx.uga.edu/
- Supplies and ordering?
  - ➤ Torrie Miller, TORRIE.BRAY@uga.edu
- Payroll, benefits, and human resources?
  - > Jason Jones, <u>jason.jones@uga.edu</u>
- Fellowship and grant submissions?
  - > Jennifer Caplinger, <a href="mailto:jcap@uga.edu">jcap@uga.edu</a>

# **PBS Graduate Admission Policies**

### Admission Procedures and Criteria

The primary mechanism for admission to the PhD program in the PBS department is through the UGA Integrated Life Sciences (ILS) Graduate Admission Portal program (<a href="http://ils.uga.edu/">http://ils.uga.edu/</a>) Students apply to ILS, not directly to the PBS program. Key factors considered for admission to the ILS graduate program are: prior research experience and productivity; evidence of work ethic and commitment to biomedical research; evidence of appropriate educational background; grade point average; English language exam scores (for international applicants); reference (particularly from laboratory supervisors); research interest of available faculty mentors; and other requirements of the UGA Graduate School. Admitted students will select a major professor and degree-granting program after the first semester in the program based on laboratory rotations. ILS students may arrange rotations with PBS faculty during their first semester in the ILS program by directly contacting PBS faculty affiliated with the ILS program. If, at the end of the first semester, an ILS student and a PBS faculty member mutually agree for a student to join the PBS faculty member's lab group, a formal request must be submitted to the PBS Graduate Coordinator and PBS Department Head to review the student's credentials and confirm availability of financial support for the student. Admission to the PBS graduate program is not official until approval by the Graduate Coordinator and Department Head is obtained.

It is also possible, but less common, for PhD applicants to be admitted directly into the program with a pre-selected and confirmed faculty advisor and application review by the Graduate Program Committee. Key factors considered by the Graduate Program Committee for direct student admission are the same as described above for the ILS program. Direct admit PhD students do not perform rotations and may not be eligible to receive departmental teaching assistantships.

# Change of Degree Objective

The Department of Pharmaceutical and Biomedical Sciences offers the Master of Sciences (MS) and Doctor of Philosophy (PhD) degrees. Some students who do not complete the PhD requirements may be awarded an MS degree, when appropriate.

# **Transfer Students**

Students wishing to transfer to the PBS PhD program from another graduate program are assessed by the same criteria as other incoming students. UGA does not allow the transfer of credits for PhD students.

# Financial Assistance

PBS graduate students may be awarded teaching (TA) or research (RA) assistantships from various sources. Upon selecting a major professor and joining their laboratory, students may be supported by a research assistantship via their major professor's grants, or remain on a departmental or university assistantship. All full assistantships, whether from the department, Graduate School, or external funding agencies, are accompanied by a nearly-full tuition waiver and subsidized health insurance. Students are responsible for all relevant fees.

# Departmental Teaching Assistantships

Departmental teaching assistantships are available to qualified students, and are awarded on a competitive basis. These assistantships may be renewed annually contingent upon satisfactory performance of TA duties, remaining in good standing in the graduate program, satisfactory research and academic progress, and availability of funds. Teaching assistantship duties are assigned by the Graduate Program Committee and may include teaching, grading, proctoring, or other support services in the classroom and laboratory. Departmental teaching assistantships correspond to approximately 18 hours per week of service. Graduate assistants are required to carry a full course load (18 credit hours) each semester they are supported and are expected to maintain a minimum cumulative grade point average (GPA) of 3.0. The assistantship may be terminated due to academic probation, failure to make satisfactory progress toward completing degree requirements, failure to satisfactorily perform teaching duties, or termination from the graduate program for any other reason.

# Research Assistantships

Faculty with external funding typically support the graduate students in their laboratories with Research Assistantships. The details of these assistantships vary based on the funding agency. Research assistants are not required to perform teaching assignments in the department. The department also strongly encourages students to apply for external fellowships (e.g. NIH, PHRMA, NSF). Partial research assistantship awards can also be combined with partial departmental teaching assistantships' in such cases, the TA assignment is reduced proportionally. In addition to these sources of full assistantships, many PBS students receive UGA and outside funding awards that provide supplements to their stipends or funds for travel and research expenses (e.g. ARCS Foundation, AFPE, Sloan Foundation).

# Curriculum and Program Requirements

#### Committees and Advisement

The PBS Graduate Program Committee acts as an advisory committee until the student chooses a Dissertation Advisory committee. Each student will form a **Dissertation Advisory Committee** before the end of the first year in residence. This committee will approve the Program of Study and dissertation prospectus and conduct the preliminary examinations and dissertation defense. The major professor and student will keep the Dissertation Advisory Committee regularly informed of research progress and problems.

The advisory committee will include at least four members, including the major professor, one additional PBS graduate faculty, and one graduate faculty member from outside PBS. The outside faculty member must satisfy the UGA guidelines for qualifications for membership in the graduate faculty. The fourth committee member can be from within or outside the department. In consultation with the major professor, it is the responsibility of the student to carefully and thoughtfully select committee members with appropriate expertise and commitment to student training sufficient to provide the guidance and assessment required to evaluate the quality of the science proposed. The Dissertation Advisory Committee members must be approved by the Graduate Coordinator and the Dean of the Graduate School.

Student progress in the program will be evaluated by each committee member during annual committee meetings. The first annual committee meeting should be held within the first semester of the second year, and meetings must be held at least every 12 months. At each committee meeting, each member of the committee should complete an "Annual Advisory Committee Assessment" form to assess the student's progress. The major professor should collect these forms, discuss the results with the student, and submit the compiled forms to the graduate program assistant. If more than one committee member of the major professor gives the student an "Unsatisfactory" evaluation, the student and major professor must develop a remediation plan to improve performance. For example, the remediation plan may7 include additional coursework, a more structured schedule in lab, and/or more frequent committee meetings.

The **Program of Study** is an official document listing the courses for a degree program, which is to be filled out on the proper form by the student and Major Professor, and approved by the Dissertation Advisory Committee. A Preliminary program of study is a non-binding plan that should be discussed and approved at the first committee meeting in the second year in the program. The Final Program of Study must be approved and submitted to the Graduate School prior to the notification of the qualifying examination. The Program of Study form is submitted through the UGA Graduate School portal GradStatus. All courses included on the Program of Study must have a grade of 3.0 or higher. PHRM 9300 must be included; GRSC 7770 should not be included.

# Curriculum Requirements

# 1. Two of the following three courses must be completed:

PHRM 8010	Medicinal Chemistry & Structural Biology	4 credits
PHRM 8020	Molecular Pharmacology of Disease and Therapeutics	4 credits
PHRM 8030	Molecular Pharmaceutics	4 credits

# 2. Current Topics and Scientific Communication:

PHRM 8080	Grant and Manuscript Writing	3 credits
PHRM 8200	Pharmaceutical & Biomedical Sciences Seminar*	1 credit/sem
GRSC 8550 or PHRM 7230 Ethical issues and responsible conduct in research		1 credit
PHRM 8250	Presentation Skills**	1 credit/sem
GRSC 7770	Graduate Teaching Seminar***	1 credit
GRSC 7001	GradFirst Seminar****	1 credit

<sup>\*</sup>Seminar course is required to be registered every semester in the program

**3. Electives:** At least 5 credit hours of 8000-level electives are chosen by the student, major professor, and advisory committee. At least one elective (3.0 credit hours) must be a PHRM course. Options include (but are not limited to):

PHRM 8010 Medicinal Chemistry/Structure	BCMB 8212: Advanced Gene, Cell, Biochem II
PHRM 8020: Molecular Pharmacology	CBIO: 8100: Advanced Immunology
PHRM 8030: Molecular Pharmaceutics	CBIO 8400: Advanced Cell Biology
PHRM 8100: Pharmaceutical Analysis I	GENE 8120: Advanced Topics/Gene Expression
PHRM 8110: Pharmaceutical Analysis II	GENE 8920: Nucleic Acids
PHRM 8120: Mass Spectrometry	GENE: 8930: Advanced Molecular Genetics
PHRM 8190: Chemotherapy and Cancer	VPHY 8010: Mammalian Cell Physiology
PHRM 8260: Pharmacokinetics	VPHY 8400: Neurophysiology
PHRM 8270: Contemporary Concepts in	VPHY 8960: Molecular Toxicology
Pharmacokinetics	CHEM 8110: Protein Structure-Function
PHRM 8500: Engineer. of Protein Therapeutics	CHEM 8040: Advanced Physical Biochemistry
PHRM 8600: Drug Targets in Signal	CHEM 8189: NMR Spectroscopy
Transduction Cascades	CHEM 8310: Reaction Mechanisms in Organic
PHRM 8940: Organ Systems Toxicology	Chemistry
PHRM 8930: Chemical Toxicology	CHEM 8320: Synthetic Organic Chemistry
BCMB 8112: Advanced Gene, Cell, Biochem I	CHEM 8340: Organic Spectroscopic Analysis

# 4. Additional Language Requirements for International Students:

LLED 7768: Required for TOEFL iBT speaking scores ≤22 or IELTS speaking scores <6.5 LLED 7769: Required for TOEFL iBT speaking scores 23-26 or IELTS speaking scores 6.5-7

<sup>\*\*</sup> Students are required to take 4 semesters consecutively (typically the first two years of the program)

<sup>\*\*\*</sup>Required for TA assignments only, per UGA TA Policy

<sup>\*\*\*\*</sup>University Requirement, must be completed within the first year

# 5. Laboratory Research:

PHRM 9000 Dissertation Research
PHRM 9300 Dissertation Writing

Variable, minimum 30 credits 3+ credits

# **GradFIRST**

Beginning Fall 2022 Graduate students must complete a 1-credit GradFIRST seminar (GRSC 7001) during fall or spring of their first year unless they are enrolled in an exempt program. The GradFIRST seminars supplement discipline-specific training in graduate students' academic programs with focused professional development and engagement/networking opportunities.

Completion of GradFIRST will be listed on a student's program of study (G138) form in GradStatus. In the section titled "GradFIRST requirement" the student should list the semester in which the course was completed. Students in programs granted an exemption by the Graduate School, or students who matriculated prior to Fall 2022, may note that they are exempt from this requirement. GRSC 7001 should not be listed as a course under "Course Information" in programs of study.

# Comprehensive/Qualifying Examinations

#### Overview

Students must pass a comprehensive qualifying examination before becoming a candidate for the PhD degree in Pharmaceutical and Biomedical Sciences. The qualifying exam is comprised of two parts: (A) a written research proposal based on the student's planned dissertation project, and (B) an oral exam based on the presentation and defense of this proposal. The purpose and goal of the qualifying exam are: (i) to assess a student's ability to independently develop a sound scientific research plan within two to three year's timeframe remaining to complete a Ph.D. dissertation and (ii) to develop critical presentation, communication, and thinking skills. At the time of the qualifying exam, the student is expected to demonstrate sufficient mastery of background knowledge in their respective research area and capability to independently conduct scientific experiments in the lab. Evidence of proficiency at the time of the qualifying exam may include but is not limited to recognition in the form of individual graduate fellowships or awards, internships, first-author publications, co-authorship publications, submitted manuscripts, or the inclusion of relevant preliminary data in the proposal.

#### Timeline

The qualifying exam should be held in the summer of the student's second year but must be completed by the end of the first semester of the third year. Failure to complete the first attempt by the end of the first semester of the student's third year will be treated as if the student had failed both attempts to pass the qualifying exam. If a second attempt is granted, it must be completed by the end of the second semester of the student's third year. Notice of Examination must be sent to the Graduate Program Assistant AT LEAST three weeks prior to the scheduled exam. Failure to do so will result in the cancellation and rescheduling of the exam.

# Dissertation Advisory Committee

A critical component of the qualifying exam involves the formation of a Dissertation Advisory Committee comprised of the major professor (PI), one or more faculty from the PBS department, and at

least one member must come from outside the department or University. A member of the Dissertation Advisory Committee other than the major professor, serves as the qualifying exam chair to facilitate the exam process. The exam chair, not the major professor, is responsible for collecting votes and feedback and communicating these to the student.

# Research Proposal

Students must submit an independently developed, well-written, NIH-style research proposal. The Research proposal should take the form of the narrative portion of an NIH predoctoral grant proposal. The format of the proposal should generally follow NIH NRSA fellowship grant preparation instructions. Please use Arial 11, single-spaced with numbered pages, and 3.4" margins all around. Total length should be 6 pages (not including references) plus a Specific Aims page. In general, the proposal should include the following:

- i. A "Specific Aims" section present the major hypothesis being tested, and 2-4 specific aims to be accomplished during the dissertation work (≤1 page).
- ii. A "Significance" section that reviews the essential background related to the proposed project and explain the importance of the problem or critical barrier to progress in the field that the project addresses. The student should demonstrate a comprehensive understanding of the relevant literature, but should also be concise, selectively discussing the most important experimental paradigms and key results in the context of the goals of the proposal. Describe the scientific premise for the proposed project, including consideration of the strengths and weaknesses of published research or preliminary results crucial to the support of the proposal. Preliminary results are optional, but a minimal presentation of relevant results can be a valuable addition to assist the Advisory Committee's evaluation. The results need not be generated by the student's own efforts, but the work of other should be appropriately credited. Explain how the propose project will improve scientific knowledge, technical capability, and/or clinical practice in one of more fields. Describe how the concepts, methods, technologies, treatments, services, or preventative interventions that drive this field will be changed if the proposed aims are achieved.
- iii. Although an "Innovation" section is generally not needed for NIH Fellowship grants, it is required for this research proposal. The "Innovation" section should describe any novel concepts, approaches or methodologies, instrumentation or interventions to be developed or used, and any advantage over existing methodologies, instrumentation, or interventions.
- iv. An "Approach" section should describe the overall strategy, methodology, and analyses to be used to accomplish the specific aims of the project. Elaborate the experimental design and methods proposed and how they will achieve robust and unbiased results. Discuss potential problems, alternative strategies, and benchmarks for success anticipated to achieve the aims. A short concluding paragraph should summarize how the field will be advanced by the study and provide a realistic timeline and an overview of the research priorities.
- v. The proposal should be concisely written. Tables and Figures should be numbered, clearly referred to and embedded in the text, and presented with informative legends (Arial 10 is acceptable) that are included in the page limit. The document should be completely referenced (Literature Cited) with full citation (not included in page limit).
- vi. The research proposal must be made available to all committee members, either by email and/or through a hardcopy, at least 5 business days before the date of the oral exam. It is the student's responsibility to obtain confirmation that committee members have received the proposal.

The research proposal should be focused on a novel direction related to the student's current research activities and will proceed as described in this policy. The research proposal can be loosely based on the research area in the major professor's laboratory but must be independently written and developed by the student. The general topic of the grant may be the same as existing projects in the lab and can overlap with grants previously written by the PI; however, the specific aims must be designed by the student and must not significantly overlap with aims previously developed or written by the PI (or anyone else). It must be written in the student's own words; direct use of text from any other source without proper citation is plagiarism and may be reported to the academic dishonesty office. The PI can provide general guidance and advice on the proposal but may not directly edit or suggest specific experiments or aims. Students are allowed to submit a proposal that they have written as part of a grant-writing course as long as it meets the above requirements for independence.

# **Oral Examination**

Students must defend their research proposal in the oral exam format. All members of the student's Dissertation Advisory Committee must be present for the oral exam, either in person, or by teleconference if necessary. The format of the oral examination should loosely include a 30-minute presentation followed by committee questions. The proceedings can be directed by the examination chair. The major professor may participate in the examination, but in order for the exam to assess the student's own capacity for independent thinking, the major professor should refrain from answering questions for the student, dominating the examination, or otherwise unduly influencing the examination process. If deemed necessary by the examination chair, the major professor may clarify some questions or may question the student in limited areas. Students should state the scientific goals or hypothesis of the planned research/topic, discuss relevant research that serves as background for the proposed project, indicate those scientific areas that are well understood and those that require more investigation, discuss research strategies for obtaining the desired information, include relevant preliminary data if applicable, suggest expected outcome and alternative strategies, and display a professional presentation style (references, spelling, etc.). Furthermore, students are expected to master comprehensive knowledge in the scientific areas the proposal relates and the core graduate courses they have undertaken. At any time during the presentation, the committee may question the student on any subject that they deem to be relevant. Although there is no specified time limit, the oral exam generally last ~2 hours.

#### Procedures for Voting and Re-takes

Immediately after the oral exam, the student will be asked to leave the room and the committee will discuss the student's qualifications based on the written proposal and the student's performance during the oral exam. Each committee member will assign a grade of "Pass" or "Fail". If more than one committee members assigns a grade of "Fail", the student must retake the qualifying exam within 6 weeks or else a time period determined by the exam committee. If a student receives a grade of "Fail" from more than one committee member on the second attempt, he or she will be dismissed from the graduate program or allowed to complete a terminal master's degree at the discretion of the Dissertation Advisory Committee. If the written research proposal and oral exam are passed, the student is admitted to PhD candidacy.

# First Author Manuscript and Verification

The student must have at least **one** completed first author manuscript as a programmatic requirement. A completed manuscript is any peer reviewed published, in press, or under review manuscript. A provisional patent application is also acceptable. **Prior to the Graduate Coordinator signing off on the thesis defense, verification of this requirement must be submitted to either the Graduate coordinator or graduate program officer. Failure to complete this requirement may impact your graduation timeline.** 

# Options for verification

- 1. Provide the DOI of the peer reviewed manuscript.
- 2. Provide a copy (digital is acceptable) of the published peer reviewed manuscript.
- 3. Provide a copy of the peer reviewed manuscript that is either in press or under review. The journal correspondence validating your submission must also be provided.

# Dissertation Writing and Defense

Dissertation Guidelines: <a href="https://grad.uga.edu/index.php/current-students/policies-procedures/theses-dissertations-guidelines/theses-and-dissertations-overview/">https://grad.uga.edu/index.php/current-students/policies-procedures/theses-dissertations-guidelines/theses-and-dissertations-overview/</a>

#### Before the Defense

The student must meet all departmental graduation requirements prior to dissertation defense, including all coursework on the Program of Study, a final year departmental seminar and a complete first author manuscript. The student and/or major professor must notify the Graduate Program Assistant of the scheduled date, time, and location for the dissertation defense at least three weeks in advance. Failure to provide notice of the dissertation defense within the required timeframe may result in the exam being canceled and rescheduled. It is the student's responsibility to apply for graduation, perform dissertation format checks, and submit all required paperwork with the UGA Graduate School by the posted deadlines.

Deadlines: <a href="https://grad.uga.edu/index.php/current-students/important-dates-deadlines/">https://grad.uga.edu/index.php/current-students/important-dates-deadlines/</a>

#### The Dissertation

The dissertation is the final component of a series of academic experiences, which culminate in the awarding of the post baccalaureate degree. The dissertation fulfills the following major objectives: a) it represents original research and scholarship; b) it demonstrates the student's ability to understand and critically evaluate the literature of the field; c) it reflects the student's mastery of appropriate research methods and tools; and d) it shows that the student can address a major problem, arrive at successful conclusions, and report these results in a literate fashion. The findings of a dissertation should be worthy of publication in a refereed journal or other scholarly medium. The dissertation must demonstrate unity and purpose. All parts of the dissertation must contribute to stated objectives of the research. Methods used in the research must be described adequately to permit an independent investigator to repeat the work.

Students are referred to the UGA Graduate School's procedural guide for University regulations concerning the preparation and distribution of the dissertation. The latest information concerning preparation, style, copyright issues, format, binding and distribution of the dissertation are available on the Graduate School website. The Department of PBS requires that each member of the Dissertation Advisory Committee receive a final copy at least three weeks before the final defense. The committee are then asked to alert the faculty advisor when they have evaluated the work and indicate if they approve of the defense going forward. Once the faculty advisor has the input from all members, the Graduate Program Assistant's Office should receive an email from the advisor indicating the defense will either move forward, or if there are major issues that need to be addressed prior to the exam being held.

# Oral Defense of the Dissertation

The Oral Defense is a public meeting and requires notification through the UGA Graduate School. As such, the Notice of Exam form must be submitted to the Graduate Program Assistant's office **no later than three weeks' prior to the scheduled exam date.** The final defense will consist of a seminar presentation by the candidate of his or her research, which is open to all members of the department and University community. This presentation will be followed by an oral examination from the advisory

committee members covering the substances of the research and other relevant subjects. Only the advisory committee may be present during this part of the examination. The dissertation Advisory Committee will determine the success of failure of the candidate and inform him or her of their decision immediately following the defense. In order for the student to pass the examination, the advisory committee must approve both the written dissertation and the oral defense of the dissertation. If more than one committee member does not vote to approve either the written dissertation or the oral defense the student will have one additional opportunity. If successful, the student is awarded a PhD degree upon completion of the remaining Graduate School degree requirements. If the final written dissertation or oral examination in unsatisfactory the second time, the student is dismissed or allowed to pursue an MS degree at the discretion of the Dissertation Advisory Committee.

# Progression and Deadlines

# Major Professor Selection

A major professor is chosen either at the end of the first semester in the ILS program, or during the admissions process for direct-admit students.

# Advisory Committee Selection

An advisory committee is chosen by the end of the first year in residence, typically no later than before the beginning of the fall semester of the second year. It is critical to form the committee as soon as possible in order to receive guidance for selecting course electives and to ensure scheduling of the first committee meeting.

# Committee Meetings

Students will have annual committee meetings starting in the Fall semester of their second year, and then at least every 12 months until graduation. Students must obtain confirmation from their committee that they are ready to schedule their dissertation defense.

# Completion of Coursework

Required coursework is typically completed in the first two years, but it is possible to proceed with qualifying exams prior to completion of coursework. A Final Program of Study may be submitted including planned but not yet completed coursework. Any changes will require submission of an updated Program of Study.

# Program of Study

The student, major professor, and advisory committee will work together to develop a preliminary Program of Study. The preliminary Program of Study form must be discussed and approved during the first committee meeting, Fall semester of the second year, and submitted to the Graduate Program Assistant. The Final Program of Study must be approved by all committee members by the end of the second year in the program and submitted to the Graduate School prior to scheduling the qualifying exams.

# **Qualifying Exams**

The written and oral qualifying exams must be successfully passed before the end of the fall semester of the third year. The oral exam must be scheduled and confirmed with all committee members before the end of the summer of the second year, and must be held by October 15 of the third year. If a second attempt is required, this must be completed within 6 weeks of the first failed exam, or at a time recommended by the Dissertation Advisory Committee.

# Dissertation Defense and Graduation

The time required to complete the PhD program varies depending on the student's background and the nature of the dissertation project. Students typically graduate in approximately 5 years.

# Timeline Worksheet

Matriculation Date:		
1. Committee Formation – within 1st year of Deadline:	f Residence	
2. 1st Committee Meeting – By end of 1st S	Semester of 2 <sup>nd</sup> yr	
3. 2nd Committee Meeting – By end of 1st  Deadline:	Semester of 3 <sup>rd</sup> yr	
4. Comprehensive Exam (CE) – By end of  Deadline:  Finalized Program of Study:  Deadline (~1 mth before CE):		
Notice of CE form submission:  Deadline (~1 mth before CE):		
5. 3rd Committee Meeting – By end of 1st  Deadline:	Semester of 4 <sup>th</sup> yr	
6. 4th Committee Meeting – By end of 1st  Deadline:	Semester of 5 <sup>th</sup> yr	
7 Graduation application form submission Deadline: Notice of Defense/exam form:	า	
Deadline:		
Graduation Date:		

# Waivers, Extensions and Grievances

Students may appeal to the Graduate Program Committee to have a core course requirement waived. The student must be able to document that they have previously taken and are knowledgeable in the subjects contained in the course under appeal. Appeals of first semester courses must be made, in writing, within two weeks of the student entering the graduate program.

Graduate program policies, course requirements, exam deadlines, and other program requirements are subject to well-justified requests for waivers/exemptions submitted beforehand, and to appeals submitted after a decision has been made. In the first year, before the student has a major professor, the student may submit written requests for waivers, extensions, or appeals to the Graduate Program Committee. After a major professor has been identified and an advisory committee has been formed, waiver requests initiated by either the student or the major professor should be first discussed by the advisory committee, and — if approved by the advisory committee — the request should be forwarded to the graduate committee by the major professor.

The University of Georgia students have the right to appeal academic decisions. An appeal must be made within 30 days after the student receives the grade or ruling in dispute. Usually the appeal goes first to the unit responsible for the decision (for example, grades or departmental graduate program policies are appealed to the department; Graduate School policies are appealed to the Graduate School; University policies to the Education Affairs Committee). An unfavorable ruling at one level is appealed to successive levels. For example, a department ruling can be appealed to the College in which the institutional unit is located; a college ruling can be appealed to the University Council Education Affairs Committee; the Education Affairs Committee ruling can be appealed to the President of the University; and the President's ruling can be appealed to the Board of Regents.

# Academic Performance and Dismissal

University of Georgia graduate students must maintain an average of 3.0 GPA or higher on all graduate courses taken. Grades below 3.0 are not acceptable for courses on the Program of Study, which includes all required core courses. In the first semester that the cumulative GPA falls below 3.0, students are placed on academic warning by the University of Georgia Graduate School, and are required to meet with their major professor to develop a plan to improve their academic performance. If the cumulative GPA is below 3.0 for a second consecutive semester, the student is placed on academic probation and cannot receive a teaching assistantship stipend. If the student receives a GPA below 3.0 in any semester while on probation, they are dismissed from the Graduate School.

PBS graduate students may be dismissed from the program at the end of any semester if they have not made sufficient academic progress to warrant continuation of study, have not met their responsibilities, have not met their admittance stipulations, or have not maintained accepted standards of conduct. This would apply to: students who spend two consecutive semesters with a cumulative GPA below 3.0; students who make a "U" or a "C" in a core course; students who fail to pass the preliminary

examination or the final oral examination; students who fail to make acceptable progress in their dissertation project; students who fail to gain approval of their thesis or dissertation; or ethical violations. Failure to make acceptable progress in the dissertation project may be demonstrated by unsatisfactory grades in dissertation research courses (PHRM 9000) or by more than one poor annual committee evaluation. Ethical violations that warrant dismissal from the program include but are not limited to: violation of ethical principles concerning treatment of animals; violation of ethical principles concerning teacher-student relationships; falsification of data or records; plagiarism; and academic dishonest – including incorporation of materials into papers, theses, dissertations, etc. without appropriate attribution.

# **Graduate Student Travel**

#### Guidelines

Graduate students are eligible for departmental travel funds (subject to budget availability) to attend conference where they are presenting their research once per year beginning in the second year in the program. Before receiving departmental travel funds, students must demonstrate that they have applied for travel awards offered by the meeting organizers, sponsoring professional organizations, and/or the University of Georgia Graduate School.

Students must receive full approval before their travel begins. Travel authorities should be submitted for departmental approval at least 6 weeks before travel is scheduled to begin to allow sufficient time for routing through the university business offices. Applications for travel funding from the University of Georgia Graduate School may require earlier submission. Students will not be permitted to travel or receive travel reimbursement if the travel authority has not received full university approval.

#### Procedures

- Travel expense estimates must be submitted to the Graduate Program Assistant at least one week
  prior to the deadline for Graduate School Travel Funding. The conference presentation title,
  abstract, and proof of abstract acceptance must be provided in PDF format. Any documentation
  for additional travel awards must accompany the request. The Graduate Program Assistant must
  submit the funding grant request to the Graduate School.
- 2. The student's major professor must review the travel authority indicating approval of the travel and authorizing other means of support for travel, i.e. grant funds.
- 3. The student will work with PBS staff to prepare and process the Request to Travel, per UGA guidelines.
- 4. Graduate students are responsible for arranging their airline reservations. Airfare can be direct billed to the department through a UGA approved travel agency, facilitated by PBS staff. Direct billing airfare cannot be arranged unless the travel authority has been approved. Tickets purchased online or at other locations cannot be direct billed and are non-refundable. If the trip is canceled, the student cannot be reimbursed for the airline ticket.

- 5. Students may pay for conference registration directly and submit these charges for reimbursement. If this poses a financial difficulty for the student, they should contact PBS staff to explore possible options.
- 6. Students should pay for their own food, lodging, and transportation costs during travel, and retain receipts for reimbursement. Students traveling together should purchase tickets separately, and students sharing a hotel room should request that the bill be divided and charged evenly. Hotel receipts must show a zero balance. If claiming per diem for reimbursements, it is the student's responsibility to check the allowable rates for the location visited. UGA per diem policies apply.
- 7. Lodging expense reimbursements are subject to UGA travel policies. AirBNB, VRBO, and similar lodging options are not reimbursable according to UGA policies.

# Safety and Security

The following is not a comprehensive list of safety requirements or expectations. See the various documents that are outlined in the following list for more details. It is your responsibility to understand how to handle the chemicals and equipment associated with your research projects.

# Laboratory Safety

The University of Georgia publishes a laboratory safety manual that contains guidelines for laboratory safety, chemical storage, waste disposal, and other important information. Familiarity with the fundamental concepts outlined in this document is considered essential for working in the departmental laboratories. Manual can be found at <a href="https://esd.uga.edu/">https://esd.uga.edu/</a>.

## No Gloves in Hallways

Laboratory workers are not to wear gloves outside the laboratory. This is a departmental policy.

# Required Yearly Training

All graduate students are required to complete Right-To-Know and Hazardous Materials Management Training (Training links can be accessed through <a href="https://esd.uga.edu/">https://esd.uga.edu/</a>). These certificates must be filed with the laboratory's RTF forms. This training must be updated on a yearly basis. Additional training is necessary for specialized experiments that include the use of respirator masks, radioactive materials and radiation, and high-risk biohazards.

#### Waste Disposal

No hazardous wastes are to be poured down the sink drains or placed in the trash. These substances are to be placed into containers labeled "Hazardous Wastes" along with the identity of contents and % compositions. When these containers are full, complete the forms in CHEMATIX for pickup. https://chematix.uga.edu/Chematix/

# Radioactive

Radioactive compounds require a special license which requires training in proper handling and disposal procedures. These are explained in Radiation Safety Procedures of the University of Georgia. The license can be revoked if food is eaten in the laboratory. <a href="https://research.uga.edu/safety/radiation/">https://research.uga.edu/safety/radiation/</a>

#### Biohazards

Some laboratories work with biohazards of differing degrees. It is the student's responsibility with the PI to understand how to properly handle biological samples. Generally, most wastes can be autoclaved then disposed of in the regular trash. <a href="https://research.uga.edu/biosafety/">https://research.uga.edu/biosafety/</a>

#### Animal Use

All laboratory personnel and students are expected to comply with all Federal and University regulations related to the ethical treatment of research animals, and should not handle research animals without required training. https://research.uga.edu/oacu/iacuc/

# Personal Safety

Safety glasses or goggles and laboratory coats are worn for most experiments and are required when handling hazardous materials. Appropriate laboratory attire includes low-heeled, closed-toe shoes and clothing that protects the body. Sandals, shorts, and tank tops are not allowed in the laboratories. No eating, smoking, or drinking is allowed in laboratories.

#### Visitation

In the interest of security, students should not admit guests to the laboratory areas. Students should be aware of and abide by any restrictions concerning hazardous laboratory restrictions.

# Additional Policies and Helpful Information

#### Graduate School Bulletin

All graduate programs at the University of Georgia are administered through and governed by the UGA Graduate School. Details of programs, policies, requirements, and procedures for graduate studies are described and annually updated in the Graduate School Bulletin. Students should become familiar with the current regulations, policies, and schedules contained in this publication, and are responsible for meeting all requirements and deadlines for his or her degree program. <a href="https://grad.uga.edu/index.php/current-students/policies-procedures/graduate-bulletin/graduate-bulletin-a-c/">https://grad.uga.edu/index.php/current-students/policies-procedures/graduate-bulletin/graduate-bulletin-a-c/</a>

# ATHENA: Schedule of Classes and Online Registration

Complete registration instructions for each semester including the list of course offerings, class dates, registration schedules, payment of fees, and drop/add policies are available on ATHENA, the online access to the student information system. All students are required to consult with their major professor prior to registration for each semester. Information can be assessed and students may register for classes online at <a href="https://athena.uga.edu">https://athena.uga.edu</a>.

# **Internships**

Students interested in internship opportunities should discuss opportunities with their major professor and the Graduate Coordinator. Students participating in summer internship programs must obtain prior approval of their major professor and the Graduate Coordinator. Internships are typically only approved if the student is in good academic standing. If an internship is approved, students must notify

the Graduate Program Assistant with all details, and an internship course can be set up if elective credit is desired.

# Teaching Experience

Graduate students may be given the opportunity to acquire teaching experience and assist in the teaching of professional courses. This experience provides valuable insight into the efforts required to teach a successful course. TA assignments may take the form of contact with students in the lab, conduction of discussion groups, grading papers, preparing laboratory demonstrations, or any aspect of instructional activity approved by the UGA Center for Teaching and Learning. Students who have performed well in TA assistantships and meet UGA requirements may be given more independent teaching assignments if they wish to gain more experience. Proper attire and appearances are expected for graduate students while fulfilling their teaching obligations. Graduate teaching assistants are not allowed to evaluate other graduate students. As such, TA assignments will be for undergraduate level courses only.

# Academic and Scientific Dishonesty

Students in the PBS graduate program are held to the highest ethical standards. There is absolutely no place in the graduate program for academic or scientific dishonesty, including all forms of plagiarism and data falsification. Academic dishonest is grounds for dismissal from the program. See the UGA policy on academic honest at <a href="https://honesty.uga.edu/">https://honesty.uga.edu/</a>. Each student must become familiar with these standards and regulations, and is responsible for maintaining adhering to the strictest standards of academic and scientific integrity and honest.

# Responsible Conduct of Research

In addition to the basic University principles and policies governing academic integrity, students engaged in scientific research have a special obligation to adhere to the highest standards of Responsible Conduct of Research. The University of Georgia provides several courses and seminars in the Responsible Conduct of Research that meet NIH and NSF requirements for students funded by these agencies. Students may learn more about these courses and register for the seminar series at https://research.uga.edu/integrity-support/rcr/.

#### Records of Research Data

All research data obtained by graduate students should be properly recorded and dated in a standard laboratory data book. At the completion of study, students should turn in the data book to the major professor. All research data remains the property of the University of Georgia.

## Leave Time

Graduate students are expected to be at work during normal hours of operation of the University throughout the calendar year. Student should notify their Major Professor of their class and work schedules, and request approval for times they will be away from campus. Graduate students do not accrue leave time.

# Desk and Office Space

Incoming graduate students are typically assigned desk space in rooms associated with the faculty advisor. Upon joining the lab, students may move to desk space assigned to their major professor and

acquire keys from the College of Pharmacy facilities management. Key card access to buildings and lab is also obtained through the facilities management.

#### **Fmail**

Each graduate student will be given a UGA (MyID) email account. The University of Georgia account and the graduate student listserv will be used by the Graduate Coordinator and office staff to contact you and distribute critical information. It is the student's responsibility to check this email account daily.

# Office Materials and Supplies

Supplies needed for research may be obtained from the departmental business office. The department does not furnish paper, notebooks, pads, postage, etc. for personal or class use of the graduate students.

# Photocopying

Each student will be authorized for a certain number of copies each year. These are limited accounts. The departmental copy machines are restricted for the duplication of materials necessary for specific departmental assignments and to support student research.

#### Administrative Services

The main responsibility of departmental administrative staff is to serve the faculty. Administrative assistance is available to graduate assistants by authorization of the Department Head or major professor for work directly related to their teaching assignments.

# Computers and IT Support

There are several departmental computers and printers dedicated for graduate student use. Most of the computers have been connected to the college network, which may be accessed by logging in with a MyID and password. Use of all UGA computer and/or network resources is limited by the "University of Georgia Policies on Use of Computer". Please be sure to read these policies so you understand your legal obligations. <a href="https://eits.uga.edu/access">https://eits.uga.edu/access</a> and <a href="https://eits.uga.edu/access">security/infosec/pols</a> regs/policies/aup/

As noted, certain violations may constitute a crime, potentially resulting in prosecution. Other violations may result in disciplinary action including, but not limited to, revocation of your network/email accounts. If you have questions regarding any of these policies, please contact the College of Pharmacy IT staff for assistance. If you require technical assistance or have other related inquiries, you are encouraged to submit a ticket at <a href="https://helpdesk.rx.uga.edu/">https://helpdesk.rx.uga.edu/</a> using your UGA MyID and password. Please remember to check your ticket status for any updates or questions that IT staff may post in response.

# Departure Procedures

# **BEFORE departing,** it is the student's responsibility to:

- 1. Submit new or forwarding contact information to PBS Graduate Program Office: email, mailing address, and LinkedIn accounts are all requested.
- 2. Turn in keys to College of Pharmacy Facilities Office.
- 3. Ensure laboratory space and equipment are cleaned and ready to be reallocated.

# **Forms**

Please check with the Graduate Program Assistant for details on submitting forms through the Graduate School.

Graduate School forms: <a href="https://grad.uga.edu/index.php/current-students/forms/">https://grad.uga.edu/index.php/current-students/forms/</a>

**Internal PBS Forms:** 

- 1. Notice of Examination Form
- 2. First Author Manuscript Verification form

# **Pharmaceutical and Biomedical Sciences**

# **NOTICE OF EXAMINATION**

Notice of Examination must be reported to the PBS Graduate Program Specialist at least three weeks in advance of examination date.

1.	Student: (full legal name)
2.	Student ID: 81#
3.	Student's email address:
4.	Major Professor(s):
5.	Committee Members:
6.	Exam: Choose One Comprehensive Oral Exam
	Day: Date: Time: Building/Room Number:
	Dissertation/Thesis Exam
	Day: Date: Time:
	Building/Room Number:
	Thesis/Dissertation Title:
	Human subjects in research: Yes No
	Project number: Date approved by IRB:
7.	Graduation:  Anticipated date of graduation:  Month  Year

# Pharmaceutical and Biomedical Sciences First Author Manuscript Verification

Prior to the Graduate Coordinator signing off on the Thesis Defense Form, verification of a first author manuscript must be submitted to either the graduate coordinator or graduate program officer.

# Options for verification

- 4. Provide the DOI of the peer reviewed manuscript.
- 5. Provide a copy (digital is acceptable) of the published peer reviewed manuscript.
- 6. Provide a copy of the submitted manuscript and journal correspondence validating your submission.