Department of Drug Discovery and Development
Graduate Student Handbook

(Updated November 15, 2024)

AUBURN UNIVERSITY
HARRISON COLLEGE
OF PHARMACY

Department Mission

The Department of Drug Discovery and Development (DDD) within the Harrison College of Pharmacy (HCOP) comprises faculty, students, and staff who are committed to improving the quality of health through pharmaceutical sciences education and research. Our philosophy in supporting a professional and graduate curriculum of pharmacy education empowers students in active learning and helps produce graduates that are life-long, science-based learners; possessing a fundamental knowledge base that is vital for advancing clinical practice and associated research. We equally shoulder the responsibility for developing the next generation of pharmaceutical and biomedical sciences scholars by designing and implementing curricula that enable students to excel during their graduate education, acquire high-level post-graduate training, and launch successful careers in academia or industrial, biomedical, and/or pharmaceutical research. We strive to conduct state-of-the-art research that: is marked by innovative use of models, techniques, and approaches; facilitates interdisciplinary collaborations; is impactful to the fields of medicinal chemistry, pharmaceutics, and pharmacology; and fosters clinical translation.

Our department seeks diversity in its culture and is committed to the Auburn University vision of an open, diverse, and inclusive professional, academic, and social environment. We strive for excellence in all our endeavors, provide local academic leadership, serve as a regional resource for colleagues and the public at large, and maintain a national and international presence based on the reputations of our faculty, students, and programs.

Honor Code and Privacy of Student Information

Academic Honesty

Academic Integrity

Auburn University is dedicated to honesty and strong moral behavior in academics. Cheating and plagiarism are expressly prohibited by the Auburn University Academic Honesty Code.

Students who attend Auburn are expected to attain high competency and deep understanding in their areas of study. While developing skills and knowledge, Auburn students must commit themselves to core principles and behaviors consistent with academic and personal integrity:

- **Honesty** – Upholding trust and honesty by doing your academic work and not cheating.
- **Fairness** – Following correct academic procedures and practices as stated in course guidelines and as defined by Auburn University.
- **Respect** – Growing as a student by facing academic challenges and interacting productively with instructors.
- **Responsibility** – Being accountable for and accepting responsibility for class assignments and personal academic development.

Examples of Academic Dishonesty

- Using unauthorized sources in preparation of your work.
- Copying from another student's exam, paper, or assignment.
- Use of materials not authorized during a test, e.g., electronic devices, notes, textbooks, notes written on any part of your body or clothing including hats and shoes.
- Submitting a paper, report, examination, or any class assignment that has been altered or corrected, in part or in whole, for reevaluation or re-grading without the consent of the instructor.

- Serving as or enlisting the assistance of another as a substitute in the taking of examinations
- Enlisting the assistance of another to author a paper or write a paper for someone.
- Altering or misusing a document for academic purposes. This would include university forms and doctor's excuses.
- Selling, giving, lending, or otherwise furnishing to any other person any material (homework assignments, tests, etc.), whether electronically or otherwise which can be shown to contain the questions or answers to any examination scheduled to be given at some subsequent date in any course of study, excluding questions and answers from tests previously administered and returned to a student by the instructor.
- Altering or attempting to alter an assigned grade on any official Auburn University record.
- Instructors may delineate other actions that they consider a violation of the Academic Honesty Code in a written course syllabus.
- Plagiarism or using the words or ideas of another as if they were one's own without giving the author or creator credit through proper documentation or recognition, as using footnotes.

Since the act of plagiarism is a particularly egregious affront to scientific integrity, it warrants special attention. Plagiarism may occur in seminar abstracts, research proposals, term papers, theses, and similar documents. It includes not only the copying of another's writing, word for word, without the use of quotation marks and without giving an appropriate citation but also the theft of another's ideas by paraphrasing their words without paraphrasing their words without citing a reference. Plagiarism is as serious an act of dishonesty as falsifying experimental data or cheating on an exam.

Simply stated, we are honest and trust one another. The faculty trusts that your work is your own. Students make sure that all their work is their own. If your work – be it coursework, manuscripts, or research- is the result of a collaboration or utilization of ideas or labor of others, this must be acknowledged. All faculty and students agree to uphold the Honor Code.

Family Educational Rights and Privacy Act

For those involved in department teaching activities, your access to student information is governed by the Family Educational Rights and Privacy Act (FERPA), which protects the privacy of student records.

Information regarding FERPA can be found at
http://www.auburn.edu/administration/registrar/policy.html#ferpa or
https://www2.ed.gov/policy/gen/guid/fpco/ferpa/index.html

Graduate Program Requirements

Please use the following link to access information about the Auburn University Graduate School: http://graduate.auburn.edu/

Overview

The long-range goal of the graduate program in DDD department is to prepare students as independent scientists with a strong basic science background and the ability to advance the translation of basic scientific discoveries into therapeutics. Students ideally suited for graduate study in this department have an undergraduate degree in chemistry, biology, biochemistry, chemical engineering, microbiology, physiology, pharmacy, or any discipline in the biological sciences. PhD students must complete at least 60 semester hours of coursework, including at least 30 graded credit hours. PhD students must pass the doctoral comprehensive exams and complete dissertation requirements according to all graduate school requirements. Master's degree students must complete at least 30 semester hours of coursework, including at least 15 graded credit hours. Students in the thesis-based master's degree programs must also complete a thesis.

Learning Outcomes

1. The department has established four learning outcomes that are used to define the overall goals of the curriculum. These are listed below:

Students will develop a broad knowledge base of the pharmaceutical sciences to be applied to their chosen sub-discipline (medicinal chemistry, pharmacology, pharmaceutics) and solve relevant pharmaceutical problems. Pharmaceutical Sciences has become a much more integrated discipline than it has been historically. This has necessitated that students be able to integrate the knowledge from many associated sub-disciplines to be successful in their future careers. The department has therefore developed two core courses of four credits each that all students are required to take in their first year that is taught by faculty from all three of the sub-disciplines. From this core course series, students should be expected to achieve the following outcomes:

A. Possess functional knowledge of basic drug chemistry; protein structure and basic enzymology; receptor theory and signaling; an understanding of enzymes as targets for drug action; how drugs act as receptor agonists/antagonists; an understanding that ion channels, transporters, DNA, RNA, and proteins can all be drug targets; and understand how genomics affects drug targeting and action.
B. Possess a basic understanding of absorption, distribution, metabolism, and excretion (ADME) principles as they relate to clinical and experimental drug function. This includes an understanding of dosage forms; routes of administration; absorption kinetics; distribution rates and extent factors; distribution to specialized tissues and body compartments; the different phases of drug metabolism; the different drug excretion mechanisms and excretion kinetics; and drug design strategies to optimize ADME including consideration of pharmacogenomics principles.
C. Carry this foundational knowledge into their sub-discipline coursework to enhance their sub-discipline mastery
D. Use this integrated knowledge base for integrated thinking to develop novel research ideas
E. Students will develop expertise in their chosen field of the pharmaceutical sciences and apply this knowledge to a current pharmaceutical problem. Specialized knowledge is still the cornerstone of graduate work, but students must be able to utilize the information to solve relevant pharmaceutical problems. This is provided through their research, seminar, and the specialized coursework of their plan of study.

2. The students should be expected to achieve the outcomes same as those listed previously in section 1 above.

3. Students will demonstrate the ability to form a novel scientific hypothesis, test the hypothesis, and evaluate the results. These skills are the foundation for any scientist but must be developed over time. These will differ for each student depending upon the area of specialization but are meant to build on outcomes 1 and 2. This outcome will require the utilization of the knowledge from outcomes 1 and 2 but also utilize the skills of utilization and evaluation of the scientific literature. This will include methods analysis and development as well as evaluation of results. The utilization of this will be demonstrated in the following outcomes:

The production of a master's thesis which will involve the production of a novel scientific hypothesis, testing of the hypothesis, and evaluation of the results in collaboration with their major advisor representing someone who is experienced in the area.

3a. The production of a novel research idea that will be written using the NIH format for a 2-year grant without preliminary data. This will be presented to the student's committee for evaluation and presented in a seminar to the department for scrutiny. This grant is different from the student's dissertation research

and is meant to develop their independence as a researcher utilizing the knowledge they have gained in Objectives 1 and 2. This work may also serve as a starting point for a career in academia. It is designed to foster the ability to form a novel scientific hypothesis and test the hypothesis. Since this is only a proposal and this work will not be conducted while the student is in graduate school, they will not be able to evaluate the results, but this will be strengthened in outcome 3b.

3b. The production of a dissertation which will involve the production of a novel scientific hypothesis, testing of the hypothesis, and evaluation of the results in collaboration with their major advisor representing someone who is experienced in the area.

4. Students will demonstrate the ability to communicate with the scientific community both verbally and through the written word. Related to this is the expectation that students will give oral presentations and publish manuscripts and/or book chapters as evidence of their ability to communicate with a scientific audience. Publication and presentation of scientific results is a key component to the career development of a scientist. This will be demonstrated in the following outcomes:
4a. The delivery of seminars at the departmental level as well as talks, posters, and seminars at the local, regional, national, and international levels.
4b.The production of a thesis or dissertation, publications, and book chapters in scientific literature as appropriate.

Graduate Student Research Activity and Expectations

Every graduate student under the advice of their major professor is expected to maintain a vigorous research program. This is demonstrated through the submission of abstracts and presentation of posters and talks at national and international meetings, as well as participation in the preparation of manuscripts submitted for publication in peer-reviewed journals. The following are the expectations of Pharmaceutical Sciences graduate students:

- Contribute to maintaining an intellectually stimulating environment, emotionally supportive, safe, and free of harassment.
- Be committed to graduate education, and demonstrate effort in the classroom, research, and other academic settings.
- Respect for others and understand that research space, equipment, and other resources are shared, and that care must be exercised, with problems reported as they arise.
- Be knowledgeable of the policies and requirements of the graduate program listed in this handbook as well as the Auburn University Graduate School Bulletin, and strive to meet these requirements, including meeting appropriate deadlines. The Graduate School handbook provides various policies and procedures in this weblink: https://graduate.auburn.edu/handbook/
- Maintain an elevated level of professionalism, self-motivation, engagement, excellence, scholarly curiosity, and ethical standards.
- Continuously strive to be knowledgeable of past and current literature that influences the field of study.
- Balance duties and allocate professional time to be academically effective.
- Be responsive to the advice of and any constructive criticism from the graduate committee.
- Discuss policies on academic work hours, sick leave, and vacation with the research advisor, Graduate Program Officer (GPO) or the Director of Graduate Programs.
- Complete all pertinent laboratory, College, and University orientations and training such as human subject training, new graduate student orientations, safety training, and Title IX training.
- Acknowledge primary responsibility to complete the degree and develop a career following degree completion. The graduate student should seek guidance from the research advisor, thesis/dissertation committee members, and other mentors.
- Laboratory notebooks and drafts of all papers to be published from the student's research project must

be submitted to the major advisor before the advisor will approve the next graduation steps.

For guidance on the use of AI, please use:
https://journals.plos.org/ploscompbiol/article?id=10.1371/journal.pcbi.1011863

Courses

A listing of departmental courses can be found here:
http://bulletin.auburn.edu/coursesofinstruction/pyps/

As soon as they are accepted for admission, entering students should begin collaborating with their primary mentors, the Department GPO, and the HCOP Administrator of Academic Programs to plan their first year of coursework. Enrolled students should design their coursework with their respective committees as soon as they are formed.

Elective courses

In consultation with the GPO and their Advisory Committee, students may select from several graduate electives that meet their needs and interests. Note that only courses at the 6000 level or higher count towards degree requirements. Students may take courses below the 6000 level if no other graduate course exists to meet their needs. Courses below the 6000 level will still be covered by graduate student assistantship tuition waivers, if the student does not exceed the credit hour maximum during their graduate study (110% of credit hours required for the degree). Students are encouraged to consider auditing such courses to reduce the risk of exceeding the maximum allowable hours for a tuition waiver (see https://web.auburn.edu/alpha/audit.aspx). Grades earned from undergraduate courses will not be used in the calculation of the GPA for either retention or graduation but will appear on the graduate transcript. The Auburn University Course Bulletin provides a complete listing of courses offered on the Auburn campus. Availability of elective courses will vary by year and semester. The student annual review process should include future course selections to provide guidance for students. A list of graduate elective courses that students have taken in recent years from different departments outside HCOP is provided in the appendix.

Directed Studies Courses

Auburn University offers directed studies courses, also referred to as directed reading, special problems courses, and independent studies, per its established policy.

Directed studies courses allow in-depth study of a particular subject by a student who is well into her or his major and, in extraordinary circumstances, accommodate scheduling issues when no other remedy is available.

Directed studies courses should not normally be used as replacements for required courses or as a solution to routine scheduling problems.

Provost Guidelines on Directed Studies

These guidelines support Auburn University's Policy on Credit for Directed Studies found in the AU Policy Database:

https://bulletin.auburn.edu/Policies/Academic/directedstudiesetc/#:~:text=A%20student%20must%20have%20the,of%20her%2Fhis%20degree%20program.

A student must have the approval of her/his dean and the provost to take more than 9 hours of directed readings coursework for credit over the course of her/his degree program.

Additional Requirements for International Students

International students are required to take a semester-long course to become familiar with graduate education in the US and at Auburn University.

UNIV 7000: INTERNATIONAL GRADUATE EXPERIENCE (0 credits – Fall)

The goal of this course is to allow new international graduate students a semester-long opportunity to become familiar with not only the inner workings of Auburn University but also American and Alabamian life and culture.

International students may be required to take additional coursework through the English as a Second Language Program. Details on this program can be found at the following link: http://www.auburn.edu/academic/international//esl/. Relevant coursework includes INTL 1800 or INTL 1820, as determined by the GPO, in addition to INTL 1830. This requirement may be waived through a minimum score of 23 on the speaking section of the Internet-Based TOEFL or a 50 on the SPEAK test offered by the Auburn University ESL Department, or other exceptional evidence of English language proficiency.

Course Transfers

Graduate credit taken in residence at an international institution, or a regionally accredited U.S. institution may be transferred when recommended by the student's major professor, advisory committee, or graduate coordinator, and when also approved by the dean of the Graduate School. Such transfer credit must fall within the time limits of the degree. Students seeking transfer credit must provide documentary evidence showing that the course is comparable to similar graduate courses at Auburn University and relevant to the student's plan of study. Students must also provide an official transcript showing credit earned for the course. No prior commitment is made concerning whether transfer credit will be accepted. A student must earn at least 24 semester hours, or half of the total hours required for a master's degree, whichever is greater, at Auburn University. A program that requires 30 hours of credit will be limited to 6 semester hours of transfer credit.

The total number of credit hours that may be transferred from another accredited institution towards a doctoral degree varies by program but must be less than 50% of the credit hours listed on the Plan of Study. Such transfer credit 1) must fall within the time limits of the degree, and 2) must be approved by the advisory committee and the dean of the Graduate School. In the case of graduate degree programs offered through joint, cooperative, or consortia agreements, the student must earn most credits from the participating institutions. No transfer credit will be approved without an official transcript. No course on which a grade lower than B was earned may be transferred. Additionally, credit will not be allowed if the combined GPA on graduate work taken at other schools is less than 3.0 on a 4.0 scale, nor may transfer credit be used to improve the GPA on courses taken at Auburn University.

Students who are admitted to a graduate certificate program may use a limited amount of coursework taken at another accredited university to meet certificate requirements, with the approval of the program faculty and the Graduate School. * The total number of credits transferred shall not exceed 40% of the total required for the Certificate. Total credits allowed to transfer may be less as determined by the Certificate Program. Such transfer credit must fall within the time limits of the certificate program. Students must provide an official transcript showing credit earned for the course and documentary evidence that the course is comparable to similar graduate courses in the certificate program at Auburn University. No course on which a grade lower than B was earned may be transferred.

*A student may not use the same graduate course for both undergraduate and graduate credit.

Grades

To receive a graduate degree at Auburn University, a student must earn a cumulative GPA of 3.0 on a 4.0 scale on all courses carrying graduate credit. No more than nine hours beyond the student's Plan of Study is allowed to obtain the cumulative graduate GPA (CGGPA). No grade below C (including unsatisfactory grades for courses taken under the S/U option) is acceptable for credit toward a graduate degree. Each

graduate course in which a grade below C is received must be repeated at Auburn University whether it is listed on the student's Plan of Study. Both the original grade and the grade for the repeated course will be counted in calculating the CGGPA. Course credits transferred from another institution may not be used to satisfy this requirement. Courses retaken will not count against the nine-hour limit beyond the student's Plan of Study in obtaining the minimum CGPA.

Only grades in Auburn University courses approved for graduate credit will be used in determining the overall GPA for continuation of enrollment in the Graduate School. If at the end of any semester, the term GPA is below 3.0, or the CGGPA falls below 3.0, the student will be placed on academic probation. If the CGGPA remains below 3.0 after the next nine credit hours of graduate enrollment (both graded and ungraded), the student will be placed on academic suspension. The student may be readmitted only after completion of a remediation plan recommended by the academic unit and approved by the Dean of the Graduate School. No coursework taken as part of the remediation plan may count toward the student's degree or CGGPA. Graduate-level courses for which grades below C were earned may not be repeated during the remediation period.

Purpose of Policy

The university is committed to maintaining the highest level of academic quality and integrity in the instructional process.

The policy and these guidelines are designed to bolster both academic integrity by ensuring that the academic quality of directed studies courses is materially equivalent to the academic quality of other courses, regardless of format or mode of delivery.

Doctoral Degree Requirements (PhD)

Advisory Committee and Plan of Study

After the student has enrolled in the doctoral program, an advisory committee should be selected by the student and their major professor. The advisor should be able and willing to provide leadership, direction, and encouragement to the student. Advisory committee members should be selected for their specific contributions to the student's area of research and ideally will complement the knowledge and expertise of the major advisor. It is in the best interest of the student to maintain contact with his/her advisory committee throughout the program of study. The student and the committee should work together to avoid confusion regarding the criteria upon which completion of each phase of the graduate program is based and when the student is ready to move forward to the next phase. The committee should be formed by the end of the second semester and meet no later than the end of June. Those admitted in the Spring/summer semesters may form their committee in the following year. The advisory committee is responsible for developing the student's Plan of Study and conducting the doctoral general and final examinations. It should consist of at least four members of the Auburn University Graduate Faculty. Faculty who taught the course work and those who are highly relevant to the student's dissertation topic are appointed as the committee members. Additional voting members may be appointed to the committee (including no more than one non-Auburn University faculty member, who must hold a terminal degree in the field). Most of the Auburn University affiliated committee members, including the major professor, must be members of the Graduate Faculty at Levels 1 and 2, preferably from the DDD department. The major professor must also be a graduate faculty member (level 2) in the department/program granting the degree. The Plan of Study should be prepared by the student and the advisory committee by the end of the student's first year and monitor the progress annually. The Graduate School recognizes that changes may be warranted, and a form is available for amendments as required by student needs, research interests, and course availability.

Doctoral Examination

General Examinations: A general examination (A preliminary examination) is required of all candidates for the degree of Doctor of Philosophy, Pharmaceutical Sciences. This examination shall consist of a written and oral portion and is to be administered by the policies outlined in the following sections.

Written Examination

The major professor and graduate student will select and schedule a one-week examination period (5 consecutive working days and 20 hours for the examination). The examination should be scheduled after the student has completed the formal graded coursework listed on their Plan of Study to the satisfaction of the advisory committee. The Written examination should be taken as soon as the student has completed all required coursework which typically takes 2 – 2.5 years. The Department Head and the Director of Graduate Programs should be notified, in writing, of the scheduled date.

A. Members of the student's advisory committee, should be contacted about the scheduled written examination and invited to submit questions in writing. The major professor may solicit, at their discretion, questions from other graduate faculty members of the Department. Examiners should be contacted at least two weeks before the first day of the scheduled examination week.
B. Written question(s) are to be submitted by each committee member to the major advisor, who shall collect and collate all the submitted questions to prepare the draft examination. The draft examination should be submitted to review and approval by GPO or Director of Graduate Programs. The committee chair may contact the examiners to ensure that the examination is representative of the appropriate area(s) of study, appropriately challenging, and that the examination can be completed within the one-week examination period (20 hours) allocated. If necessary, the major professor should contact examiners to make appropriate modifications to the examination.
C. The major professor shall divide the examination into appropriate portions and administer the examination to the graduate student during the examination week. The graduate student shall complete one portion of the examination each day for approximately four hours per day.

The major professor shall collect the completed examination and distribute the appropriate sections to the faculty examiners for grading. Each examiner should grade his/her portion using an appropriate (percentage or letter) grade and indicate if the score is satisfactory or unsatisfactory.

The major professor (and advisory committee) shall draft and sign a final report recommending one of the following:

1. The student has passed the written examination (overall pass).
2. The student has demonstrated proficiency in the identified general subject area(s) and has passed this (these) portion(s) of the written examination. The student's performance in other identified general subject area(s) was determined to be deficient and the committee recommends one of the following:
    - The student failed one section of the exam; they will be allowed to retake a second exam from that faculty member. The reexamination should be scheduled within one month of the time of this notification.
    - The student must complete specified coursework in these general subject areas. The criteria for successful completion will be established by the major professor and advisory committee.
    - The student should complete specific remedial work in these general subject areas under the direction of the major professor and approved by the advisory committee (i.e., Directed Readings, etc.).
    - If the student fails more than one section of the exam, he or she may be terminated from the PhD program.

The major professor shall notify, in the form of a memorandum, the student and the Department Head of the final recommendations of the advisory committee. The major professor and advisory committee will indicate approval of the final recommendations by signing the notification.

General Oral Examination

An oral examination shall be held within 3 months after successful completion of the written examination. The oral examination shall consist of preparation and oral defense of an original research proposal by the student.

Thus, the subject matter of the research proposal cannot be substantially similar to the published literature, including preprint server publications (bioRxiv, medRxiv, and the like). The subject matter of the research proposal must be different from the student's dissertation research project. Finally, the subject matter of the research proposal must be different from any proposal or written work submitted in partial fulfillment of the formal requirements of any coursework, including but not limited to the DRDD 7000 Grant Writing course.

The major professor and the student's advisory committee, in consultation with any other appropriate faculty, should determine whether the subject matter of the research proposal is appropriate. In particular, the process for determining whether the subject matter of the research proposal is "different" from other works should be articulated during the very first committee meeting for the student and understood by all. Consistency in establishing oral examination criteria and administering this exam by all disciplines in DDD (medicinal chemistry, pharmaceutics, pharmacology) is expected.

The scheduling of the oral examination requires approval by the Graduate School. The student must inform the Graduate School, in writing via a form from the Graduate School of the oral general examination date at least one week before the proposal defense. https://gradforms.auburn.edu/forms/form-c.aspx

If the student does not unanimously pass the initial proposal defense, additional work will be recommended to strengthen the proposal. A second proposal defense will then be scheduled. Satisfactory completion of this step advances the student to candidacy status. The student who fails the second time will be dismissed from the program by the graduate school.

Preparation: The student shall draft a summary of the research proposal, including specific aims and obtain approval from the major professor and advisory committee to proceed with the preparation of the full research proposal. The major advisor should instruct students to complete the draft summary of their proposed research before taking the written examination portion of the General Exam. Students should distribute copies of the draft proposal to each Advisory Committee member before taking the written examination. The proposal should be prepared using current grant (preferably PHS/NIH) application forms appropriate to the student's field of study and agreed upon by the committee and should describe a research project of at least two years' duration. The completed proposal shall be distributed to members of the advisory committee and the GPO no less than 7 working days before the scheduled oral defense.

Guidance on the Proposal Format

Specific Aims (one page)

State concisely the goals of the proposed research and summarize the expected outcome(s), including the impact that the results of the proposed research will exert on the research field(s) involved. List succinctly the specific objectives of the research proposed, e.g., to test a stated hypothesis, create a novel design, solve a specific problem, or develop new technology.

Research Strategy

Organize the Research Strategy in the specified order using the instructions provided below. Start each section with the appropriate section heading-Significance, Innovation, Approach. Cite published experimental details in the Research Strategy section and provide full reference details. Include information on preliminary studies, if any. Preliminary data can be included within any of the sections listed below (included in the 6-page limit).

A. Significance
    1. Explain the importance of the problem or critical barrier to progress in the field that the proposed project addresses.
    2. Explain how the proposed project will improve scientific knowledge or technological capability.

B. Innovation
    A. Describe how the proposed work challenges current research or uses novel concepts, approaches, methodologies, instrumentation, or interventions.

C. Approach
    1. Describe the overall strategy, methodology, and analyses to be used to accomplish the specific aims of the project. Include how the data will be collected, analyzed, and interpreted as well as any resource sharing plans as appropriate.
    2. Discuss potential problems, alternative strategies, and benchmarks for success anticipated to achieve aims.
    3. If the project is in the preliminary stages of development, describe any strategy to establish feasibility, and address the management of any high-risk aspects of the proposed work.
    4. Point out any procedures, situations, or materials that may be hazardous to personnel and precautions to be exercised.
    5. Include any courses that you plan to take to support the research training experience.

Preliminary Studies

Include information on preliminary studies, if any. Preliminary data can be included in any of the sections listed above.

Literature Cited

List the most relevant literature cited in the proposal. This section is not included in the page limit.

Oral Defense and Examination by the Committee

The student shall present the original research proposal as an open seminar and defend the proposal before a closed meeting of the advisory committee. The advisory committee may allow, at their discretion, other graduate faculty members of the Department to participate in the closed, oral defense. The oral examination will evaluate the student's familiarity with the literature in the specialty area in which the student anticipates conducting their research, skill in the recognition of meaningful questions for investigation, ability to design experimental protocols, and ability to communicate effectively. The committee may recommend that: 1) the proposal is satisfactory, and the student has passed the oral examination, 2) the student has passed the oral examination, but the proposal requires minor modification, within a specified period as agreed upon by the examining committee 3) the proposal and the student's oral defense was unsatisfactory. Successful completion of the oral examination requires unanimous support from the student's advisory committee. If unsatisfactory, a re-examination may be given upon recommendation of the advisory committee and approval by the Dean of the Graduate School. The re-examination will be scheduled within three months after a failed examination. The re-examination topic will be determined based on the major advisor's recommendations. The student who fails the second time will be dismissed from the program by the graduate school.

Final Oral Examination

It is the joint responsibility of the doctoral candidate and their advisor to plan in advance to accomplish all the graduate school requirements for the final oral examination. The student shall participate in an oral defense of the dissertation research project. It is desirable but not required to allow at least one complete semester interval between the written/oral exams and the final dissertation defense. Members of the student's Advisory Committee and a Graduate School representative (outside reader) shall administer the

final defense examination.

1. A dissertation constituting a complete description of the student's research project is required of all candidates for the degree of Doctor of Philosophy (Pharmaceutical Sciences).
2. The student shall make draft copies of the dissertation that has been approved by the major professor available to members of the advisory committee for review. The student must allow at least one month to review and suggest corrections to their dissertation by the committee.
3. After the draft copies have been approved by the advisory committee, the student shall submit the dissertation to the Graduate School for review and approval.
4. An outside reader will be appointed by the Graduate School to review the dissertation. The major professor may request the appointment of an outside reviewer at an earlier time.
5. After the dissertation has been approved by the Graduate School, the student may apply for scheduling of the Final Examination. This application must be filed with the Graduate School at least one week in advance of the date for the Final Examination.
6. The student shall make copies of the approved dissertation available to participants in the Final Examination no later than 2 weeks before the scheduled date of the examination.
7. -The student shall present a public seminar describing the dissertation research project before the time scheduled for the Final Examination.
8. The Final Examination is administered by the student's Advisory Committee with the participation of the Graduate School's outside reader. Any member of the Graduate Faculty may attend the Final Examination.

Successful completion of the Final Examination requires unanimous support from all members of the advisory committee. If the committee determines that the student has failed the Final Examination, a re-examination may be given on the recommendation of the advisory committee and approval by the Dean of the Graduate School. Further examination requires exceptional circumstances and approval of the Graduate Council.

In addition to successful completion of all examinations, final copies of the committee-approved dissertation must be submitted to the Graduate School before the Ph.D. degree is conferred. The student is urged to consult the University Calendar for deadlines.

Summary of Procedures for Doctoral Degree Programs

The student should:

1. Obtain application forms from the Graduate School and apply by submitting all required materials to the Graduate School by the deadlines published in the Bulletin. The Graduate School forwards the application to the appropriate departmental screening committee. The Associate Dean for Academic Affairs then makes a recommendation to the Dean of the Graduate School, who sends a letter notifying the applicant of the decision.
2. Apply for an assistantship, if applicable, through the DDD department.
3. Become familiar with the requirements for the doctoral degree as published in the University Bulletin.
4. Consult with the major advisor and the departmental GPO and become familiar with departmental procedures.
5. Plan a study schedule for the first semester with the major advisor and GPO.
6. Acquire necessary forms at the Graduate School Website at (www.grad.auburn.edu)
7. Establish an advisory committee in consultation with the major advisor.
8. Prepare a Plan of Study approved by the advisory committee and department head and submit it to the Graduate School.
9. Complete coursework, including language requirements, if any, as detailed in the Plan of Study.
10. Arrange for the general written and oral examinations through the advisory committee. After the

written examination, schedule the general oral examination in advance using a form obtained from the Graduate School.

11. Submit the dissertation proposal for approval by the advisory committee and become familiar with the Electronic Thesis and Dissertation Guide, available at www.grad.auburn.edu/etd_guide.html.
12. Request graduation check in the Graduate School no later than the last day of the semester (graduation day) before the semester of graduation.
13. Register for at least one hour of coursework during the semester of graduation. Prepare the dissertation and submit a committee-approved first draft to the Graduate School for review and approval by the outside Reader, who serves as the representative of the graduate faculty.
14. Study the recommendations of the University Reader and make appropriate changes in the dissertation.
15. Upon approval of the dissertation by the Dean of the Graduate School, arrange for final oral examination.

In summary, students in the PhD degree program will be required to pass comprehensive exams, pass the general oral examination, and complete a dissertation and dissertation defense (final oral examination).

Master's Degree Requirements – Thesis Track (MS)

Students in the Master's degree program will be required to complete a thesis. The thesis topic should be selected in consultation with the advisor. Students should begin preparing their thesis proposal no later than the beginning of their second year in the Master's degree program.

Advisory Committee and Plan of Study

The student works under the direction of their major professor and an advisory committee composed of two to three members. Two must be members of the Auburn University Graduate Faculty and the DDD department. The committee chair (or one of the co-chairs) must be a Graduate Faculty member in the department granting the degree. This committee will approve the student's program of study, conduct required examinations, and direct the thesis. Plans of study should be approved and submitted to the Graduate School by the end of their first semester.

Thesis Credits

A master's student must enroll for 6 hours of thesis research (DRDD 7990: Research and Thesis). A student may register for more than 6 hours of thesis. Note, that even when no longer taking didactic courses, students must register for a minimum of one credit hour each semester.

The Thesis

After approval of the thesis proposal by the student's committee, the student may proceed with work on the thesis research. It is suggested that each phase of the research be submitted to the student's advisor for approval. After all phases (problem statement, literature review, methodology, etc.) are done, a complete draft of the thesis shall be submitted to the committee. Within 2 weeks, the committee should return its evaluation, recommendations, and corrections to the graduate student. At that time, the student is responsible for responding to these comments in the final draft to be submitted to the committee. The committee shall be given the final draft at least 2 weeks in advance of the thesis defense. The student must follow the Graduate School's formatting requirements and is responsible for obtaining and filing all necessary documents.

Thesis Defense

Students should schedule their final thesis defense at least 4 weeks in advance, and only with the approval of all thesis committee members. One week before the scheduled thesis defense, the student shall send an

announcement of the defense date to all members of the committee, as well as all other students and faculty in the department. Defense presentations are open to the public, except for the closed session for committee member questions. At the thesis defense, the student shall begin with an - oral summary of the research. This will be followed by public questions, followed by closed committee questions. Public questions will be limited to the thesis topic. Closed session committee questions may also include related coursework as listed on the student's plan of study. If the student fails the defense, one re-examination may be given on recommendation of the committee and approval of the Dean of the Graduate School.

The Associate Dean for Academic Programs of the College of Pharmacy shall be notified at the same time as committee members regarding the date thesis defense.

Summary of Procedures for Master's Degree Program-Thesis Track

The student should:

1. Obtain application forms from the Graduate School and apply for admission by submitting completed forms and other required materials as outlined in the Bulletin.
2. Apply for an assistantship, if pertinent, with the department involved.
3. Become familiar with the requirements for the desired degree as outlined in this Bulletin.
4. Consult with your major advisor or GPO and become oriented to departmental procedures.
5. Plan a study schedule for the first semester with the help from your major advisor.
6. Establish an advisory committee through your major advisor; usually done during the first semester of coursework.
7. Prepare a proposed Plan of Study in consultation with the advisory committee. Submit a plan approved by the committee and department head to the Graduate School at least one term before the term in which the student plans to graduate.
8. Consult with the advisor on approval for the thesis plan, if pertinent, and become familiar with the Electronic Thesis and Dissertation Guide, on the Web (www.grad.auburn.edu/etd_guide.html).
9. Fulfill language requirements, if any.
10. Request graduation check in the Graduate School no later than the last day of the semester (graduation day) before the semester of graduation.
11. Register for at least one hour course the semester of graduation.
12. Prepare thesis manuscript, if pertinent.
13. Arrange for the final oral examination with the advisory committee.

Policies on Progression and Reporting

Registration Requirements

Every student expecting credit toward a graduate degree must be registered with the Graduate School, and no student is considered a candidate for a degree unless properly registered. A student must be registered in the term in which degree requirements are completed. Students also must register in any semester during which the staff or the facilities of the university are used for work on a thesis or dissertation, for the taking of oral examinations, or for the removal of an "incomplete" grade. Thesis and dissertation students need thesis or dissertation final approval and submission, and the final examination register for 7990 Research and Thesis or 8990 Research and Dissertation.

A graduate student may carry a maximum course load of 16 hours per semester (14 in the summer term). This includes undergraduate courses but does not include 7990 (Research and Thesis) and 8990 (Research and Dissertation) when required of all graduate students in a department each semester. Graduate students must carry nine hours per semester or enroll in GRAD 7900/8900 with concurrent enrollment for a minimum of one hour of 7990/8990 to be classified as full-time students. To maintain full-time status,

students do not need to register for summer courses. However, students receiving assistantships during the summer term must register for at least 1-credit.

Academic Progress and Standing

The Department of DDD expects students to complete the Master's degree within 3 years. The Graduate School requires that students enrolled in a Master's degree program must complete the degree in five years or less.

The Department of DDD expects students to complete the PhD degree within 6 years (including time contributing to a Master's degree, if relevant). Students must achieve candidacy (completion of written and oral exams) within six years and complete all requirements for the degree within ten years. Upon admission to candidacy, the student has four calendar years to complete all remaining requirements for a doctoral degree. The student's time to completion begins with the earliest completed course approved for inclusion in the plan of study. If unable for any reason to complete the requirements on time, the student may petition, with the approval of the advisory committee, the dean of the Graduate School for a one-year extension. Students failing to complete the degree in the allotted time revert to the status of an applicant and must petition, with the approval of the advisory committee, the dean of the Graduate School to retake the oral examination.

Exceptions may be made for illness or other extenuating circumstances. However, the Graduate School must approve these circumstances. Students having difficulties in progressing because they believe that their advisor is not appropriately assisting them should first raise these concerns with their advisor. If the problem is not resolved to the student's satisfaction, the student should then discuss the situation with the GPO, department head, or a committee consisting of all graduate faculties in the department.

Each graduate student's progress toward a degree is monitored by the student's Advisory Committee, and issues of professional and personal development may be considered. While failure to maintain academic standards merits automatic dismissal, a student also may be dropped from the Graduate School if progress is unsatisfactory in other areas such as unprofessional behavior or failure to follow the Graduate Program requirements or policies. In such cases, the Advisory Committee will prepare a statement of deficiencies and/or grievances and discuss it in a meeting with the student. The statement must have the unanimous support of all members of the committee. The student will be warned that corrective measures must be taken within a specified time to avoid action that might result in dismissal. The committee determines the period allowed for correction. Copies of the statement of grievance and summary of the meeting will be provided to the student, the department head, the academic dean, and the graduate dean. If the deficiency is not corrected within the time allowed by the committee, a statement reiterating the grievance and recommending dismissal should be sent to the graduate dean with copies to the student, the department head, and the academic dean. The graduate dean will allow the student to respond and will make a final determination. The students and the advisory committee will be notified. The action taken will not appear on the student's official transcript, and the release of information is restricted under the University's policy on the confidentiality of student records.

Dismissal from the Graduate Program

A graduate student in either the MS or the PhD programs will be subject to dismissal from the program for any of the following reasons:

- Accumulation of 12 hours of "C" in courses taken
- Lack of satisfactory and continued progress toward completion of the degree.
- Conviction of sexual harassment in the workplace.
- A preponderance of evidence, confirmed by the thesis or dissertation committee, for research misconduct such as deliberate fabrication and falsification of research results or evidence of plagiarism.

Academic Standing

Only grades in Auburn University courses approved for graduate credit will be used in determining the overall GPA for continuation in the Graduate School. If at the end of any semester, the cumulative graduate GPA (CGGPA) falls below 3.0, the student will be placed on academic probation. If the CGGPA remains below 3.0 after the next eleven credit hours of graduate enrollment (both graded and ungraded) or two consecutive terms (whichever comes first), the student will be placed on academic suspension. * Students on academic suspension may not hold a graduate assistantship. The student may be readmitted only after completion of a remediation plan recommended by the academic unit and approved by the Dean of the Graduate School. Coursework taken as part of the remediation plan must be completed within two consecutive terms and may count toward both the student's degree and CGGPA with the recommendation of the department head and the approval of the graduate dean. * Upon completion of the remediation plan, the student must have addressed academic deficiencies and have a CGGPA of 3.0 or above. Once approved by the graduate dean, remediation plans may not be amended or extended beyond the original deadline. If a student fails to complete the remediation plan as approved or if the student earns a grade of C or below while completing the remediation plan, the student will be dismissed from the Graduate School and the designation ACADEMIC DISMISSAL will be placed on the student's official record.

*The summer term is counted as one of the consecutive semesters only if a student is enrolled during the summer term.

DDD Guidance for Lab Notebooks

What is a Lab Notebook?

A lab notebook is a(n):

- Complete record of procedures, reagents, data, calculations, and thoughts to pass on to other researchers
- Explanation of why experiments were initiated and how they were performed, as well as results
- Legal document to prove patents and defend your data against accusations of fraud
- Source of knowledge within a lab
- **Property of the University**

A lab notebook is not:

- A journal
- A record of communications
- A place to compile lab protocols/manuals
- **Yours to remove from the lab**

What should a lab notebook include? (for both paper and electronic)

- **Title page** with the researcher's name, project title, dates used, address of the lab, and signature
- **Table of Contents** listing the page numbers, dates, and titles of experiments
- **Experimental Entries** should include:
  a. Dates and titles of experiments
  b. Background information
  c. Step-by-step procedures and protocols, calculations, reagents, and equipment used during experiments
     i. *Reagents:* source, product number, lot number, expiration date, how and where stored
     ii. *Solutions:* what and how they were made
     iii. *Cells used:* type, source, passage number, growth medium

iv. *Instruments:* type, name, location, serial number

d. Observations: anything planned or unplanned, raw data, permanently affixed information regarding data location
e. Data analysis: Processing of raw data, graphs, interpretations
f. Results printed and permanently affixed. This includes graphs, tables, figures, and data analysis
g. Conclusions
h. Ideas for future experiments/edits to the current experimental plan

Electronic Data Management

- All electronic laboratory data, including literature collection, must be stored in the cloud in the Box or OneDrive folder as authorized by the major professor. No electronic laboratory data may be stored solely on a personal or laboratory computer.
- Any electronic laboratory data loss or corruption must be reported immediately to the major advisor, as this provides the greatest opportunity to recover the authentic data from off-line or archival storage.
- The name of each electronic inventory log file must contain a version number. When revising an electronic inventory log file, the following procedure must be followed:
- A new file must be created, with a new version number in the name of the file.
- Revisions are made to this new version of the file.
- Recent previous versions of log files are not deleted.
- Encryption, password protection, or blinding may be applied to electronic data file but requires password sharing and approval by the major advisor.

Lab Rotations

Lab rotations offer a student the chance to explore multiple research areas and methodologies. While rotating in a lab the student can experience the lab's working dynamics, management style, and research environment. It also allows students to build a strong network of mentors and peers from various research backgrounds. Once the students have completed the lab rotations, no more than 3, they will make a report about what they learned, why they would like to join a particular lab, and if they would fit in that group. This report will go to the Director of Graduate Programs to help facilitate the lab the student will be placed in.

How to have a better lab rotation experience:

- Take rotations seriously
- Shadow as many students as possible
- Ask as many questions as possible
- Show interest and continue to show yourself if you like a lab
- Do not stress about finishing a project
- Do not make enemies over a lab

Changing Labs

There may be a few reasons why a student may want to change labs, such as:

- Change of research topic
- PI leaves for another job
- Mentor runs out of money
- Poor lab fit

The student needs to discuss the reason for changing labs with the Director of Graduate Programs to help the student understand the administrative steps to facilitate the change and to have a conversation with the

mentor. The student will need to find a new lab, depending on the assistantship, a lab that can support them. The Director of Graduate Programs might know which faculty members are accepting new students, but it is ultimately up to the student to find another lab that fits their research interests and mentorship style.

When a student intends to change their mentor/major advisor, a meeting between the former mentor and the new mentor should be held to discuss with transparency about the strengths and weaknesses of the students and the reason for the transfer. Students transferring from labs will have a probationary time (decided by the committee in consultation with the department head) and continued enrollment can be at risk if satisfactory progress is not observed.

Transferring Between the MS and PhD Program

Changes in application status (master's to doctoral, doctoral to master's) or enrollment status (master's to doctoral, doctoral to master's) must be requested by the applicant/student involved. Requests for changes in status by applicants will require the applicant to undergo a new admissions review for acceptance. The request for a change in status by matriculants or current students must be submitted in writing to the departmental GPO and carry the endorsement of the student's major professor. Subsequent review of the request will proceed through the student's committee, and the committee will generate a written summary of opinions to be presented to the department head. If the department head endorses the request, which is only under very unusual circumstances, it will be forwarded to the HCOP Associate Dean for Academic Programs for endorsement. If endorsed, the Dean of the Graduate School must then approve it. Current international students must recertify full financial sponsorship for the issuance of a "new" I-20 form.

Plans of Study

The Graduate Student Plan of Study is no longer required by the graduate school but still the student and major advisor should prepare the plan of study document to keep track of the student progress and discuss with the advisory committee. As of January 1, 2020, this form is no longer required to be submitted to the Graduate School. The Plan of Study must be reviewed and approved by the student's advisory committee before submission. For full-time students, the Plan of Study must be submitted to the graduate committee by no later than the end of the first year for MS students and PhD students. For part-time students, the Plan of Study must be submitted before registration for the fourth course taken in Graduate School. Notification of all changes must be provided before the beginning of the final semester. Instructions for creating a Plan of Study in Degree Works can be found at:

https://graduate.auburn.edu/faculty-staff/plan-of-study-instructions/

The student is responsible for carrying out the planned program and for requesting via the major professor and advising committee to make necessary changes.

Annual Progress Report

An annual review of each graduate student is conducted by their committee each year. Beginning in the second year of the program, students are required to complete the annual progress report form found in the Appendix of this handbook and submit their completed form to their advisor and the GPO by August 15th each year. No student will be permitted to graduate if she/he fails to submit annual progress report or does not complete and submit a formal graduation check to the Graduate School before the semester of expected graduation.

Policies and Procedures Concerning Student Behavior and Grievances

Professionalism

As a professional school, the Harrison College of Pharmacy (HCOP) functions as a community of colleagues (faculty members, staff members, graduate students, and student pharmacists) who work together to advance the HCOP's mission, vision, and goals. These collegial relationships are embodied in the Covenant between Faculty and Students of the Harrison College of Pharmacy (Appendix A), which describes the commitments that faculty members and graduate students make to each other in the context of a health professions school.

In the context of a professional school, all members must take responsibility for holding their colleagues accountable for maintaining professional behavior and treating one another appropriately. At times it becomes necessary for students to have appropriate channels and procedures for reporting perceived violations by faculty and staff members of Auburn University (AU) and HCOP policies and procedures, as well as violations of the College's Covenant. As professionals in training, graduate students must recognize that they have a responsibility to the HCOP to report violations that may be occurring.

This same responsibility applies to graduate students who are pursuing education in the context of a health professions school. Students are often hesitant to report such matters, fearing retaliation from faculty and staff members. However, students are protected by University and HCOP policies, which prohibit retaliation toward those filing grievance reports. It is also important for students to understand that if student complaints and grievances are to be appropriately addressed by the HCOP's faculty and administration, it is often not possible to keep student identity anonymous.

You can view the entire policy at: https://pharmacy.auburn.edu/about/pp/grievances.pdf

Dress Code

The Walker Building of the Harrison College of Pharmacy is a professional patient care site; a dress code policy is in place for activities being conducted in the building. Graduate students with Teaching Assistantships who will be attending PharmD courses in the Walker Building should comply with the HCOP Dress Code while fulfilling course attendance requirements in the Walker Building. The HCOP Professional Dress Policy can be accessed at the following link. The same dress code applies to the graduate students who work in the Pharmaceutical Research Building. https://pharmacy.auburn.edu/about/policies.php

Email

Email is recognized by Auburn University and the Harrison College of Pharmacy (HCOP) as an official means of communication. The following policies and procedures govern the use of email and email accounts within the HCOP https://pharmacy.auburn.edu/about/policies.php

Social Media

The use of social media is acknowledged and supported to interact with others through the Web and other media. Students are encouraged to be diligent in establishing and maintaining a professional social media persona, including but not limited to picture creation and sharing, video creation and sharing, "friending", status updates in social networks, tagging of you and others in pictures and other media, blogs posts/comments, location updates, etc. Inappropriate use of social media will be investigated. Penalties for inappropriate use of social media may include academic probation or expulsion. Students are discouraged

from interacting with other students in the professional degree program (i.e., PharmD) via social media, especially for students who are receiving a graduate assistantship that includes responsibilities as a teaching assistant.

Research Compliance

Activities Involving Animals

Auburn University's Animal Resources Program requires compliance with the Animal Welfare Assurance negotiated with the Office of Protection from Research Risks/National Institutes of Health (OPRR/NIH). A major part of that Assurance involves the Institutional Animal Care and Use Committee (IACUC) that ensures compliance with the Assurance, the policies of the U.S. Department of Health and Human Services, the U.S. Department of Agriculture, and all other federal, state, and local regulations concerning care, treatment, and use of animals. All activities, whether teaching, research, production, or display of animals, and whether the activity is funded, must be approved in advance by the committee. The use of animals for any purpose that is not approved in advance by the IACUC may involve severe penalties for non-compliance with institutional policy and could jeopardize the university's Animal Welfare Assurance filed with the OPRR and the NIH. Information may be obtained from the Director of Animal Resources, at (334) 844-5667.

Human Subjects Training

Students performing human subjects research are required to complete the CITI human subjects and research ethics training during their first semester. The training can be done online at http://www.auburn.edu/research/vpr/ohs/resources.htm. Students should complete the CITI modules most relevant to their planned area of study, which may include the biomedical module, the social and behavioral module, web-based research, etc. Students participating in funded research must also complete the conflict-of-interest module. Upon completion of the training, printed certificates of completion must be provided to the Department Head and GPO. This training and documentation are required by the Institutional Review Board and should be kept up to date for the duration of graduate study.

Student Resources

Graduate Assistantships and Assistantship Policies

A limited number of Graduate Assistantships may be available. Your admission letter will specify whether you have been offered an assistantship. Assistantships may come in the form of teaching and/or research. The Department Head will make decisions on whether you will be designated as a Graduate Teaching Assistant (GTA) and/or Graduate Research Assistant (GRA) on a semester-by-semester basis, based on availability and need. HCOP tuition waiver policy:

https://pharmacy.auburn.edu/about/policies.php

Guidelines for Graduate Assistantship

1. To be on assistantship, a graduate student must:

- be in a degree-seeking program of the DDD Department. Students in degree-seeking programs will be classified as MS (thesis) or Ph.D.
- be registered for at least one course (anything carrying an Auburn University course number) during each academic term of the assistantship.
- be making satisfactory progress toward the degree.

2. Assistantships meeting certain criteria are eligible for the Graduate Tuition Fellowship. To be on assistantship AND receive a Graduate Tuition Fellowship, a graduate student must meet the above criteria and the criteria outlined on the Graduate Tuition Fellowship Web page.

3. Assistantship appointments should be 0.25, 0.33, or 0.50 Full-Time Equivalent (FTE).

> Graduate students may hold multiple assistantships (assistantships and/or hourly employment) from one or more units on campus, but together the cumulative appointment should be 0.25, 0.33, or 0.50 FTE and cannot add up to more than a 0.50 FTE (20 hours per week) appointment. This allows the students the time needed to devote to their academic programs. An exception is automatically allowed in the special case of a graduate assistant assigned to teach one/four-credit course and one three/four-credit course. In such cases, appointments will be made at 0.58/0.67 FTE, respectively. Other exceptions may be requested, with compelling academic justification, in writing to the Provost by the dean. For multiple assistantships from different units, coordinating approval memos from the home unit and the hiring units is required.

4. International graduate students on F1 visas cannot hold a greater than 50 percent work appointment. Rules for summer terms are different. Please check with the Office of International Programs in Foy Hall.

5. All international graduate teaching assistants are required to submit evidence of satisfactory speaking skills. This can be demonstrated with a score of 23 or higher on the Speaking Section of the Internet-based TOEFL (iBT), or a score of 7 on the Speaking section of the IELTS, or a score of at least 50 on the SPEAK test, which is administered at Auburn University before the start of classes. A student may be asked to enroll in a course designed to improve the oral communication skills of international teaching assistants. Hiring units are responsible for making sure that international Graduate Teaching Assistants meet the minimum requirements for employment, including but not limited to a satisfactory background check and proficiency in English. For each international Graduate Teaching Assistant, hiring units are required to submit the International Graduate Teaching Assistant Certification of Eligibility for Employment form and supporting documentation.

6. Graduate assistants who meet the requirements for GRAD7900 (Thesis Completion) or GRAD8900 (Dissertation Completion) and register concurrently for at least one hour of the Research and Thesis course or the Research and Dissertation course are considered full-time students and are exempt from FICA and Medicare deductions on graduate assistant stipends (Section 218 of the Social Security Act).

7. Effective January 1, 2014, all new graduate student employees (including hourly paid) must have an approved consumer report and/or investigative consumer report (background check) as a condition for appointment. The information contained in these reports may be used to deny individual employment or continued employment at Auburn University. The background report and its contents are deemed private and confidential and shall be disclosed only for the purposes described in "Procedures for Securing Background Reports for Graduate Students Before Hiring" to those University employees who have a need to know, or as otherwise required or permitted by law.

Assistantship Workload

Teaching and Research Assistants who are also full-time graduate students may be assigned responsibilities requiring no more than 50 % of their time. Normally for TAs, this means service for not more than an average of 20 hours per week including time spent in preparation, classroom and laboratory teaching, grading papers, etc. Responsibilities for RA's will vary with the fraction of time for which they are employed, but normally a one-half-time appointment should require more than 20 hours per week of assigned duties.

Expectations by Assistantship Type

Graduate Research Assistants (GRAs)

GRA's supports the research mission of the university. They conduct research in an area relevant to their major course of study under the direction of a faculty member. The research normally supports the faculty advisor's research and is supported by external funding. The research work leads to the student's thesis or dissertation. Research assistants supported through a research grant contract will assist faculty members

in the completion of contracted research. They may also be required to contribute to the preparation of reports for continuing projects and proposals for new grants. A Graduate Research Assistant assumes research-oriented responsibilities that involve library work, computer programming, analysis, fieldwork, laboratory experiments, scientific investigations, or other endeavors. GRAs are normally employed by the principal investigator of a funded research project.

General GRA duties include:

- Setting up research laboratories and experiments.
- Performing experiments, calculations, and analyzing the results; and disseminating new knowledge orally or in written publications.
- Reflecting on the state of the field and proposing new research problems.
- Attending conferences to present results and collaborate with other researchers.
- Training and supervising less experienced research personnel.
- Publish research results in conferences, journal papers, and research reports.
- Assisting in the preparation of new proposals.

Eligibility for GRA Position

Eligibility for Graduate Research Assistantship (GRA) is established by the principal investigator and/or the department. The recipients of research assistantships will be selected by the faculty member who directs the laboratory or research project. Preferences will be given to students who demonstrate qualifications for the position as demonstrated by (a) completion of courses related to the topic of the research, (b) prior research experience, or (c) research interests consistent with the project. Preference may also be given to doctoral students.

GRA Training

Graduate Research Assistants are required to receive lab safety training (radiation safety, chemical hazard safety, etc.) before working in any lab. GRAs will also receive training in research ethics, intellectual property rights, publications, and patent policy.

Graduate Teaching Assistants (GTAs)

GTAs support the instructional mission of the university. They are expected to work 20 hours per week and participate in undergraduate and PharmD instruction. Teaching Assistants must dress professionally, consistent with the College of Pharmacy Dress Code (https://pharmacy.auburn.edu/about/policies.php). Only official, university communication mechanisms (university email or university phone numbers) should be used by teaching assistants when interacting with students. Use of social media, texting, or cell phones should be avoided when interacting with students unless otherwise specified by the course coordinator.

Potential conflicts of interest, such as students connected to the GTA by kinship, common origin, marriage, or GTA-student relationships that might be perceived as inappropriate, should be reported to the Department Head before accepting the GTA assignment. Conflicts of interest can be managed if they are disclosed in advance. Not disclosing potential conflicts of interest related to GTA duties may result in loss of the Graduate Assistantship.

General GTA duties include:

- Instruction in a classroom setting
- Assisting with laboratory setup
- Proctoring Examinations
- Grading papers, exams, laboratory reports, and homework
- Other duties pertaining to the instructional mission of HCOP

Eligibility for GTA position

A student is eligible to hold a GTA position if a student is enrolled full-time in that semester, is in good academic standing, and has a cumulative Grade Point Average of 3.0 or higher in all graduate courses. A GTA appointment may also be determined by additional criteria including communication skills and adequate preparation in the subject area. GTA's are evaluated every semester to maintain their assistantship.

The coordinator will be responsible for collecting completed evaluations and reviewing these with the student. Evaluations will be signed by the student and evaluator and returned to the GPO to place in the student's file.

Stipend and tuition fellowships are awarded to allow students to devote full time to pursue a PhD or MS degree and to complete the requirements for the degree in as short a time as is consistent with adequate training and research progress. The student should not engage in additional employment while receiving a stipend through the graduate program, regardless of the source of that stipend, because employment causes a serious impediment to the graduate educational process. Graduate education and research are necessary initiative-taking processes, and distractions or outside employment can interfere with the ability of students to prepare satisfactorily for their future professional careers.

Continuation of Assistantships

Your academic and assistantship performance will be evaluated during each semester, and assistantships will only be renewed for those with acceptable performance. Your efforts to secure funding from other sources will also be positively considered when renewing assistantships. While it is our goal to provide Graduate Assistantships to all students, our ability to provide assistantships for the duration of your academic program may also be limited by funding and availability.

Participation in Professional Meetings

The Department encourages attendance and participation at national and regional professional and scientific meetings. Students are encouraged to seek travel funds from the Graduate School (http://www.grad.auburn.edu/forms/begin_travel_award.html). Limited funding from the DDD department or the College of Pharmacy Graduate Programs office may be available for graduate students to attend these meetings. Students should consult with their advisor in seeking travel funds. Only students who are presenting a paper or poster at the meeting may apply for departmental support. It is expected that any graduate student who attends these meetings will attend all feasible research and educational sessions along with pertinent business meetings. Failure to do so will result in forfeiture of funding. Students attending meetings are representing Auburn University and the Department of DDD. As such, students are expected to dress professionally, arrive at meetings on time, and participate in discussions.

Before travel, students must fill out a Request for Authorization to Travel (RAT) form. These forms must be completed regardless of reimbursable expenses. You can find more information on the travel policy here: https://auburnpub.cfmnetwork.com/B.aspx?BookId=12385&PageId=461580

Teaching Development and Experience

While not required, all graduate students are encouraged to seek further training and experience in teaching. Additional resources are available from the Biggio Center, including a Professional Development Seminar Series, the Preparing Future Faculty (PFF) Program, and the Graduate Certificate in College/University Teaching; the PFF and Graduate Certificate Programs require that students apply and are accepted before beginning the programs.

Professional Development Seminar Series

Registration is not needed for the Professional Development Seminar Series, and the schedule can be found at http://wp.auburn.edu/biggio/events/home/.

Preparing Future Faculty (PFF)

This program, available through the Auburn Graduate School, improves readiness to assume faculty roles, helping graduate students understand the expectations and functional realities of faculty life, developing wider institutional and personal networks, and making graduate study even more responsive to disciplinary and professional needs. Graduate students from all disciplines at Auburn University are eligible to participate in the program. Students are eligible to apply for this program during the Spring of their 1st year. However, approval to apply must be obtained from the student's mentoring committee and the department head, DDD. Applications are typically due in April for admission to the following year's class. More information can be found here: http://wp.auburn.edu/biggio/pff/.

Graduate Certificate in College/University Teaching

Students with an interest in academic careers may earn a Graduate Certificate in College/University Teaching (http://www.education.auburn.edu/teacher-education). Requirements for the Graduate Certificate include a total of 12 graduate hours, with a grade of B or better in the following courses:

- HEID 8500 The Professoriate (3 credits)
- HEID 8510 Seminar in College Teaching (3 credits)
- Supervised teaching practicum with a faculty member in the student's home department (3 credits)
- Three elective credits selected from approved courses (2 credit hours of the PFF seminar series count) Approval to apply must be obtained from the student's mentoring committee and the department head, DDD.

Parking Policies

Parking rules and regulations for students can be found in the Student Policy eHandbook and the Traffic and Parking Regulations document. All commuter graduate students are eligible for a C-zone parking permit, and vehicle registration should be completed through AU Access. Each year, there are a limited number of B-zone parking permits that are given to graduate students who demonstrate a special need to support their teaching and/or research. The GPO collects this information into a single document, and the Director of Graduate Programs office submits the request to the Graduate School. The deadline for receiving these requests is June 30 of each year, preceding the upcoming academic year. Please note that these are simply requests, thus there is no guarantee that a student will receive a B-zone permit. The Graduate school controls the final selection process.

Student Counseling and Psychological Services

Student Counseling & Psychological Services provide short-term individual and ongoing group counseling to address the emotional/developmental concerns of students. Educational and academic-related, skill-building workshops are offered to the campus community. Safe Harbor provides sexual assault/violence counseling services for victims. Students needing long-term psychotherapy, or 24-hour crisis management are provided an appropriate referral. For assistance, call (334) 844-5123 or visit the Student Counseling & Psychological Services website.

Accommodations

Students seeking accommodations are required to electronically submit their request through AU Access to the Auburn University Office of Accessibility. Once approved, students must contact the Course Coordinator

via email as soon as possible to make further arrangements. No accommodation can be provided at the course level without approval through the University's Office of Accessibility. The Office of Accessibility is located at 1228 Haley Center and the phone number is 844-2096 (V/TT) (https://cws.auburn.edu/Accessibility/). Students with defined accommodations should see the advisor so that accommodations can be arranged in the research.

Workspace Resources

Each student will be provided access to the departmental office suite and desk space in the Walker Building or PRB. Students must obtain card access and office keys by first requesting the Department's Student Services Coordinator. Keys may then be picked up at the Auburn University Access Control office, located on the bottom floor of the stadium parking deck. Upon completing degree requirements, keys must be returned to Access Control.

Phones

Phones are permitted in the office and should be used only for university teaching and research activities. Please be respectful of your officemates when using the shared phone.

Photocopies and Office Supplies

All work on the equipment available in the Department should be related to graduate coursework, research, or an assistantship assignment. Photocopying may be done on Departmental equipment if it involves collaborative research between the student and a faculty member, graduate coursework, or an assistantship assignment.

Work unrelated to any of these areas is not an acceptable reason to use Departmental equipment. To help curb unnecessary expenditures, all graduate students should try to proactively ensure that copies are made in black and white unless color copies are needed.

Administrative Support

Administrative support is limited. Usually, the only justification for soliciting administrative or work-study student assistance is regarding work related to an assistantship assignment. All requests for help should be submitted through your advisor and/or the department head.

Library and Electronic Resources

The library provides search tools and access to multiple health-related resources. Search tools most relevant to pharmacy can be found at http://www.lib.auburn.edu/find/bysubject.php#40. PubMed is a public access search engine that also is very useful (http://www.ncbi.nlm.nih.gov/pubmed/).

The Harrison College of Pharmacy licenses additional pharmacy and medical resources, including products like Clinical Pharmacology, Lexi-Comp, Facts and Comparisons, and Micromedex. These resources can be accessed via the HCOP student webpage.

Electronic resources of Auburn University must be used responsibly. Inappropriate or illegal activities conducted using University computers, networks, or email addresses will not be tolerated.

Computers

Graduate students are encouraged to own and maintain a laptop computer. Wireless internet is provided in most places on campus, and wired ports are provided in student office space. The Harrison College of Pharmacy Office of Information Technology (OIT) can provide minimal support for your computers, only as needed for departmental teaching or research activities. This includes help in establishing internet connectivity or connecting to University printers. The College is primarily a Windows-based computing environment. Students are welcome to use their preferred laptop operating system but should be aware

that support for non-Windows machines is extremely limited. The Department will not purchase software licenses for student's personal computers, but software licenses may be obtained through AU Install https://cws.auburn.edu/shared/auth/index?r=http%3A%2F%2Fcws.auburn.edu%3A80%2Foit%2Fauinstall& i=86). HCOP OIT may also be able to provide discounted licenses on other needed software, and these requests should be made through your advisor.

Funding Opportunities

Auburn Graduate Student Thesis/Dissertation Research Awards

The Graduate School provides partial support for thesis and dissertation research. As such, these awards may be used to help support the purchase of materials and equipment necessary for data collection or for travel (within or outside the United States) to conduct research. All materials and equipment purchased with Research Award funds remain University property, subject to the appropriate University financial and accounting policies.

https://ba.auburn.edu/policies-procedures/#Use%20of%20Fun

Awards will not be made to cover stipends. Students from all areas of graduate study participate in this program. The maximum award amount is $1000. The application details can be found at:

https://graduate.auburn.edu/current-students/awards-and-grants/

American Foundation for Pharmaceutical Education (AFPE)

First-year graduate student fellowships, pre-doctoral fellowships, and minority awards are available to US citizens or permanent residents (http://www.afpenet.org/apply.html). These awards are competitive and prestigious, paying between $6,500 to $12,500 per year. Pre-doctoral students who have completed at least 3 semesters of graduate education or are eligible to apply for the pre-doctoral fellowships. Awards are renewable and may be used for student stipends, supplies, books, materials, travel, etc.

Ruth L. Kirschstein National Research Service Award (NRSA)

The National Institutes of Health offers several training grants for pre-doctoral students. Students who have previously earned a PharmD degree or other terminal healthcare professional degree also may be eligible for post-doctoral awards. These awards are highly competitive but highly prestigious and financially generous. See http://grants.nih.gov/training/F [illegible] iles_nrsa.htm for further information on specific awards that are available.

Google PhD Fellowship (Deadline: 4/12)

Students must be nominated by the institute. Contact your graduate administrator to be nominated for the internal selection process. See their website for the fields of study as well as any FAQS.

Google PhD Fellowships directly support graduate students as they pursue their PhD, as well as connect them to a Google Research Mentor. Nurturing and maintaining strong relations with the academic community is a top priority at Google. The Google PhD Fellowship Program was created to recognize outstanding graduate students doing exceptional and innovative research in areas relevant to computer science and related fields. Eligibility requirements require students to have completed graduate coursework in their PhD by the academic award year when the Fellowship begins. https://docs.google.com/document/d/1IU6pwquKDOlu-Dxs6RUL45f-6fqXeq3MYb0AaI8GMos/edit

BHW's Women in STEM Academic Scholarship (Deadline: 4/15)

The BHW Scholarship offers $3,000 to a female student pursuing an undergraduate or master's degree and majoring in science, technology, engineering, or mathematics. This scholarship is offered by tech firm The

BHW Group in Austin, Texas. Citizenship Eligibility: US Citizens, Permanent Residents, Internationals.
https://docs.google.com/document/d/13edl5KvIYikGaNDQM1cyCoZo3y5IwoeiGwU4Zacp6Bs/edit

Ralph W. Shrader Graduate Diversity Scholarship (Deadline: 5/1)

These scholarships of $3,000 are awarded to current graduate students in at least their second semester who are women or minority students. Applicants must also be in a course of study that supports the mission of the AFCEA Foundation. This can include STEM majors in the fields of Geospatial Science, Computer Science, Physics, or other related fields.

NSF Graduate Research Fellowship Program

The purpose of the NSF Graduate Research Fellowship Program (GRFP) is to help ensure the quality, vitality, and diversity of the scientific and engineering workforce of the United States. A goal of the program is to broaden participation of the full spectrum of diverse talents in STEM. The five-year fellowship provides three years of financial support inclusive of an annual stipend of $37,000.
https://www.nsfgrfp.org/

NDSEG Fellowship Program (Deadline: November 18th)

Applicants must be US citizens or nationals of the US. Permanent residents or visa holders are not eligible.
Applicants must not have completed more than two years of full-time graduate study overall.
This Fellowship provides up to 3 full years of financial support with a monthly stipend.
Annual stipend of $40,800. Allows up to $1,400 for health insurance coverage
Full tuition and required fees are covered.

NIH NRSA Individual Predoctoral Fellowship (F31 and F31-Diversity)

(Deadline: April 8, August 8, December 8)

The applicant must be a citizen or a non-citizen national of the United States or have been lawfully admitted for permanent residence. The applicant "must be at the dissertation research stage of training at the time of award". Can provide up to 5 years of support, however, 2-3 is more typical. Annual Stipend is $26,352 . Institutional Allowance of $3,100 (for health insurance, research supplies, and travel to scientific meetings), Covers 60% of tuition and fees up to $16,000.

SMART Scholarship Program (Deadline: 12/1)

The applicant must be a citizen of the United States, Australia, Canada, New Zealand, or the United Kingdom at the time of application. Those awarded multi-year awards are required to serve as interns in DoD labs during the summer. Full tuition and education-related educational expenses (meal plans, housing, and parking not included). This Fellowship provides up to 5 full years of financial support with a monthly stipend (minimum 1 year). Annual stipend of $38,000. Health Insurance allowance of up to $1,200 per academic year. Miscellaneous allowance of up to $1,000 per academic year. Full tuition and required fees are covered.

Ford Foundation Predoctoral Fellowship

Applicants must be U.S. citizens, U.S. nationals, and U.S. permanent residents
Individuals committed to a career in teaching and research at the college or university level in the U.S.
Individuals enrolled in or planning to enroll in an **eligible research-based** (**dissertation-required)** program leading to a Ph.D. or Sc.D. Individuals who as of the fall semester require a **minimum of three years** of their program. Individuals who have not earned a doctoral degree at any time, in any field. Annual stipend:

$27,000 for three years. An invitation to attend the Conference of Ford Fellows. Access to Ford Fellow Regional Liaisons -- a network of former Ford Fellows who have volunteered to provide mentoring and support to current Fellows -- and access to other networking resources

AHA Pre-Doctoral Fellowship (Deadline: Sept. 7th)

Applicant must be a US citizen, permanent resident, or hold one of a range of non-immigrant visas (e.g., F1, J1 - see application website above). At the time of award activation, a candidate must also have "completed initial coursework and be at the stage of the program where he/she can devote full-time effort to research, or activities related to the development into an independent researcher".
The applicant must be an AHA Professional Member. Applicant must be a US citizen, permanent resident, or hold one of a range of non-immigrant visas (e.g., F1, J1 - see application website above). At the time of award activation, a candidate must also have "completed initial coursework and be at the stage of the program where he/she can devote full-time effort to research, or activities related to the development into an independent researcher". Applicant must be an AHA Professional Member.

AAUW American Dissertation Fellowships (Deadline: Nov. 15)

Must be U.S. citizens or permanent residents and the stipend must be used for the final year of writing the dissertation. Applicants must have completed all coursework, passed all preliminary exams, and had the dissertation research proposal or plan approved by November 1. Students already holding a fellowship or grant to support their final year of writing or completing the dissertation the year before the fellowship year are not eligible. Stipend support of $25,000 for 1 year only (PhD).

AAUW International Fellowships (Deadline: Nov. 15)

Have citizenship in a country other than the U.S. or possession of a nonimmigrant visa.
Applicants can apply for the fellowship for any year of their program but must be conducting a full year of study or research. Planning on returning to home country after graduation.
Stipend support of $25,000 for 1 year only* (PhD)
Stipend support of $20,000 for 1 year only* (MS)
*Up to 5 International Fellowships are renewable for a second year. Fellows will receive application information for this competitive program during their fellowship year.

Graduate Women in Science National Fellowship Program (Deadline: 01/10)

All women scientists conducting research in the natural sciences regardless of nationality are eligible for application for any of the GWIS Fellowships. Must be a national GWIS member.
A maximum of $10,000 can be requested to be used over a single academic year. The award supports research-related expenses rather than a stipend. Financial need for research funding is a requirement for the application, so the applicant will need to state that their proposed project is not currently supported by other means. Fellowship funds can be used for the following: expendable supplies, small equipment, publication of research findings, travel, and subsistence while performing field studies, travel to another laboratory for collaborative research, undergraduate collaborators (up to 1/3 of the total requested amount), or study subjects' compensation.

PhRMA Foundation Pre-Doctoral Fellowships

Full-time, in-residence PhD Candidate. In one of the three topics: Drug Delivery, Drug Discovery, and Health Outcomes Research. Annual Stipend $25,000 for up to 2 years. Up to $1,000 per year may be used for incidentals directly associated with the thesis research preparation (such as secretarial help, artwork, books, etc.)

AFPE Pre-Doctoral Fellowship

The AFPE recipient must be registered as a full-time student in a Ph.D degree program in the pharmaceutical sciences administered by, or officially affiliated with, an accredited U.S. school or college of pharmacy. Students enrolled in a Ph.D. or joint Pharm D./Ph.D. program and have completed the equivalent of 3 full semesters of graduate credit toward the Ph.D. and will be awarded the Ph.D. degree within 3 additional years may be eligible for a pre-doctoral fellowship.
They must be a U.S. citizen or permanent resident. Stipend amount $10,000

AFPE PRE-DOCTORAL FELLOWSHIP TYPES

Name of Fellowship	Area/Eligibility	Award Amount	Call for Applications	Due Date
AFPE Pre-Doctoral Fellowship	PhD or PharmD/PhD Pharm Sciences	$10,000	11/8	12/3
AFPE Regional Award	Lived in MI, ND, SD, MN, or WI for the past fifteen years	$10,000	11/8	12/3
ASHP-AFPE Pre-Doctoral Fellowship	Health Outcomes	$20,000	11/8	12/3
Dr. Paul B. Myrdal Memorial Pre-Doctoral Fellowship	Pharmaceutics	$10,000	11/8	12/3
Herb and Nina Demuth Memorial Award	Parenteral Drug Delivery	$10,000	11/8	12/3
Pre-Doctoral Fellowship in Health Outcome Disparities	Health in Under-Served Populations	$10,000	11/8	12/3
Kappa Epsilon AFPE Fellowship – Nellie Wakeman Fellowship	PharmD/PhD and Kappa Epsilon member	$10,000	11/1	5/1
Phi Lambda Sigma-AFPE First Year Graduate School Fellowship	PharmD./PhD in 1st year PhD and PLS member	$10,000	11/1	5/1
Rho Chi-AFPE First Year Graduate School Fellowship	PharmD./PhD in 1st year PhD and Rho Chi member	$7,500	11/1	5/1

Appendix – Departmental Forms

Committee Meeting Report

This form is to be completed by the student following each Advisory/Thesis/Dissertation Committee Meeting. The completed form should be signed by the student and all committee members, and the original submitted to the Graduate Program Officer for placement in the student's file.

Student:		**Date of meeting:**	
Committee Type (Advisory, Thesis, or Dissertation):			

1. Progress on previous recommendations:

2. Summary of discussion:

3. Recommendations going forward:

4. Other comments:

5. Next planned committee meeting (if known):

_____
Committee chairperson(mentor)

_____
Graduatestudent

_____
Committee member

_____
Committee member

_____
Committee member

_____
Committee member(external)

AUBURN UNIVERSITY

APPROVAL FOR INDEPENDENT STUDY/DIRECTED READINGS

Part I – To Be Completed By Student

Name: _____ Student ID#: _____

College: _____ Major: _____

Course Number: _____ Course Title: _____

Number of Credit Hours Requested: _____ Semester: _____, 20_____

Professor: _____ Department: _____

Grade Option:

☐ Letter Grade

☐ Satisfactory/Unsatisfactory

Part II – To Be Completed By Instructor
(Please attach a course syllabus that addresses the following four points.)

I. Objective of the course
II. Nature of the teaching-learning process and the proposed schedule of meeting
III. Proposed work products
IV. Criteria to assess the work product

_____ _____
Student Signature Date Dept. Head Signature Date

_____ _____
Instructor Signature Date ADRGP signature Date

Harrison College of Pharmacy
Department of DDD Academic
Progress Annual Report 2023-2024

Cover the Period from June 1, 2023-May 31, 2024

You are to complete the form and present it to your committee. Have your research advisor and committee members review and sign the form during your annual committee meeting.
Submit the signed form and all attachments to
Jenny Johnston
Assistant to the Director of Graduate Programs
on or before August 15, 2024

(Please note that incomplete forms or forms lacking attachments WILL NOT be accepted)

Academic Progress

Please attach to this form:

1. **A copy of the current plan of study**
2. **An unofficial transcript**
3. **A one-page summary of research progress including (hypothesis, background, experiments, results, conclusion, and future plans)**

Date:
Student's Name:
Research Advisor(s):
Date Admitted to Program:

Date of Comprehensive Exams:
(Please indicate the date you plan to take the written or oral comprehensive exams if these are not yet complete.)

Written Oral

Members of Your Advisory Committee:

Proposed Dissertation/Thesis Title:

A. **ALL** COURSEWORK TAKEN (Summer, Fall, Spring of most recent year including research/thesis units):

SUMMER

Course Number (ex DRDD 7230)	Name	Units	Grade

Semester GPA:
Cumulative GPA:

FALL

Course Number	Name	Units	Grade

Semester GPA:
Cumulative GPA:

SPRING

Course Number	Name	Units	Grade

Semester GPA:
Cumulative GPA:

******** If more space is needed for answering questions B-H attach a typed listing ********

B. **ALL** SEMINAR(S) PRESENTED SINCE ADMITTED INTO THE PROGRAM TO DATE (title, date, venue, and location).

C. **ALL** PAPERS AND ABSTRACTS **PUBLISHED SINCE ADMITTED INTO THE PROGRAM** (in chronological order with complete titles and authors and citation):

D. GRANTS WRITTEN SINCE ADMITTED INTO THE PROGRAM (list full name, date, and amount of grant/award for all academic years):

Applied For:

Received:

E. SCIENTIFIC MEETINGS ATTENDED SINCE LAST JUNE (list complete name and date(s) of meeting(s) for last academic year). If you participated academically in the meeting please note your role (poster presentation, panel discussion, moderator). For posters, please include citations for panel discussion and moderator roles, please include the title of the session.

F. **ALL** APPLICATIONS FOR FINANCIAL SUPPORT SUBMITTED SINCE ADMITTED INTO THE PROGRAM AS WELL AS FINAL FUNDING DECISION. (Include complete name and date(s) of support application. Be sure to include graduate school travel scholarships, Dean's Travel Award, and any Fellowships).

G. ADDITIONAL ACHIEVEMENTS AND AWARDS:

_____ _____

Student Signature Date

H. WRITTEN REPORT OF RESEARCH ADVISOR AND COMMITTEE COMMENTS REGARDING STUDENT" S ACADEMIC PROGRESS AND RESEARCH PLAN FOR THE PERIOD OF JUNE 1, 2023-May 31, 2024.

_____	_____
Committee Member Signature	Date
_____	_____
Committee Member Signature	Date
_____	_____
Committee Member Signature	Date
_____	_____
Committee Member Signature	Date
_____	_____
Committee Member Signature	Date
_____	_____
Committee Member Signature	Date

Work for the year is incomplete until this report has been approved by the Research Advisor, signed by all constituents listed above, and submitted to the Associate Dean for Research and Graduate Studies.

APPROVAL OF RESEARCH ADVISOR: ***APPROVAL OF DEPARTMENT HEAD:***

Advisor Signature	Date	Drug Discovery and Development Department Head Signature	Date

HCOP GTA Evaluation

Pertinent items are to be answered by the GTA's direct supervisor to provide constructive comments for the course and term specified. Indicate N/A for questions that you are unable to answer or for questions that do not apply.

Student Name: _____

Signature: _____ Date: _____

Course Coordinator / Instructor Name: _____

Signature: _____ Date: _____

Course: _____ Term: _____

	N/A	Strongly Disagree	Disagree	Agree	Strongly Agree
1. The GTA delivers course content effectively.					
2. The GTA is punctual to the classroom/lab, meetings, and scheduled appointments.					
3. The GTA is accountable for the assigned duties.					
4. The GTA is initiative-taking in identifying tasks that need to be completed.					
5. The GTA accepts constructive criticism and responds accordingly to improve him/herself.					
6. The GTA demonstrates diligence, consistency, and accuracy, and completes assignments on time.					
7. The GTA effectively manages problems through communication with students, teachers, administrators, and others.					
8. The GTA adheres to the HCOP policies, practices, procedures, and dress code.					
9. Strengths of the GTA:					
10. Areas of improvement for the GTA:					

Graduate Teaching Assistants

INTRODUCTION

Graduate Teaching Assistants (GTAs) play a critical role in the PharmD curriculum. GTAs are expected to work 20 hours/week, unless specified otherwise. Each GTA will report directly to a Curriculum Coordinator or supervisor. Continuation/renewal of a graduate teaching assistantship is made on a semester basis and contingent upon satisfactory performance.

GENERAL EXPECTATIONS

Teaching assistants in the Harrison College of Pharmacy perform a variety of tasks. Tasks may vary depending on the course. However, they will generally be expected to perform the following duties:

- Grade assignments and in-class activities
- Proctor and grade exams
- Set up Canvas courses and Box folders
- Autonomously function within software programs: Canvas, Box, ExamSoft, and Poll Everywhere
- Respond to emails from the Curriculum Coordinator
- Assist the Curriculum Coordinator and the course instructors with preparation of course assignments, exams, or lectures
- Develop familiarity with course content
- Maintain personal calendars and track GTA hours each week

GTAs are required to complete a) an onboarding training with Dr. Rogers and with the Curriculum Coordinator or supervisor and b) an annual FERPA training https://studentprivacy.ed.gov/training/ferpa-101-colleges-universities.

In addition to these above common duties, GTAs are expected to display the following characteristics:

Initiative: GTAs will receive various duties (including grading assignments) from your assigned Curriculum Coordinator or supervisor, but they are expected to show an ability to work independently. They are expected to be able to make decisions on their own with grading guidance provided by the Curriculum Coordinator or Instructor or use supervisor, but also expected to discuss decisions with the supervisor when unclear.

Communication: Maintain consistent communication with the Curriculum Coordinator or supervisor. It is pertinent that GTAs must check email daily and be able to respond to the Curriculum Coordinator 24 hours (on weekdays and 48 hours on weekends) or sooner if necessary due to the nature of the inquiry. When requested to complete a certain assigned task, GTAs must review the request, respond to and acknowledge the receipt, confirm the

deadline, and ask questions if any. In addition to maintaining consistent communication with the Curriculum Coordinator or supervisor, GTAs must communicate any uncertainties they may have as soon as possible. For example, if they have any questions regarding the assignment, GTAs must ask for clarity right away and not wait until the deadline to grade. GTAs should keep the Curriculum Coordinator or supervisor aware of any issues that arise.

Engagement: GTAs may be expected to play an active role in course discussions. This may include participating with PharmD students during activities and talking with students during discussions.

Punctuality: GTAs are expected to arrive to the assigned classroom/lab, meetings, and scheduled appointments at least 15 minutes prior to the beginning of the class/lab/exam period. This is to assist the Curriculum Coordinator with any last minute activities (e.g., technology set-up, room set-up, handouts, etc.). GTAs are expected to arrive on time to meetings with the Curriculum Coordinator or supervisor as well as instructors. When handling grading assignments, meeting the set deadline is critically important. Questions about the assignment or how to grade should be asked prior to the grading deadline.

Time management: GTAs are expected to work 20 hours/week on average. Some weeks may be less intensive and some may be more so. GTAs should effectively manage their time so that they will be able to complete grading tasks in a timely manner. If grading is taking longer than expected, communicate this with the Curriculum Coordinator or supervisor and be able to give an estimate as to when it will be completed. Please be aware that grading loads may vary throughout the semester, so GTAs should plan their time accordingly.

Graduate students are expected to manage their time effectively. Stated simply, your own class projects, homework, and exam preparation shall not interfere with assigned GTA responsibilities. The same is true for non-GTA work and other personal/family obligations.

Feedback: GTAs are expected to provide students with useful feedback on their assignments. This includes being able to tell the student what they can improve upon and what they did well and should do more of.

Positive Attitude: GTAs are expected to maintain a positive and professional attitude.

ADDITIONAL EXPECTATIONS

GTAs are expected to share their graduate course calendar with their supervisor as well as other existing/potential conflicts including outside work. In the event that GTAs are aware of future conflicts such as attending professional meetings or other planned absences, GTAs should bring this conflict up with their supervisor as early as possible and obtain prior approval. Arrangements to address this conflict may be easily done if known in advance. A GTA who requests time off may be required to make up the work either prior to or after the week/days

in which he/she is absent. Additionally, GTAs are expected to adhere to HCOP's dress code policy when in class/labs/exam rooms with PharmD students.

PERFORMANCE REVIEW

At the end of each semester, the assigned Curriculum Coordinator or supervisor who serves as a GTA supervisor will conduct a formal performance review with each GTA. The outcome of the review will go into the student's personnel file including whether a GTA is recommended for a continuation of the assistantship (with or without performance monitoring) or whether a continuation of the assistantship is not recommended. See the attached document for the performance review document.

Acknowledgement

I, _____, understand the requirements and expectations outlined in this document. Print your name.

*Note to GTAs: Please read the document carefully to ensure that you understand the document before signing.

GTA Signature: _____

Date: _____

Master's & Certificate Completion Checklist

Master's Thesis Getting Started:

Once fully admitted with final, official transcripts and degree confirmation sent to the AU Graduate School, students should:

- Contact your departmental advisor
- Register for classes*
- Check the Graduate School calendar for deadlines
- Begin selecting your advisory committee

Making Progress:

Register each semester** with advisement from your major professor

- Work towards completion of required courses for your program
- Check the Graduate School calendar for deadlines
- Complete comprehensive exams (if your program requires)
- Make progress on the Master's thesis (see timeline graphic)

Nearing Completion (one semester before you graduate):

- Register for classes*
- Schedule a graduation check with your departmental advisor (recommended)
- Check the Graduate School calendar for deadlines
- Make progress on the Master's thesis (see timeline graphic)
- Submit the Committee, Transfers, Exceptions, and Candidacy (CTEC) Form (required of all degree- seeking students)
- Submit the Graduation Application through AU Access > My Academics > Grad Application (required of all students)

Graduating (the semester you plan to graduate):

- Register* (one credit hour minimum)
- Check the Graduate School calendar for deadlines
- Clear all holds, incomplete grades, and any financial obligations
- Follow the Master's thesis timeline (see timeline graphic)
- Use the Thesis and Dissertation Guide
- Submit Master's Thesis Final Examination Report and ETD Publishing Approval Form
- Submit PDF of Thesis on AUETD
- Order regalia and participate in the commencement & graduation ceremonies (see dates and deadlines)
- Join the Auburn University Alumni Association

Doctoral Completion Checklist

Before Candidacy:

Check the Graduate School calendar for deadlines

- Register for at least one credit hour per semester to maintain continuous enrollment
- Begin by selecting an advisory committee
- Submit Committee, Transfers, Exceptions, and Candidacy (CTEC) form –***MUST*** have completed 30 credit hours of coursework (including transfer credits)
- Submit your Request for the Report on the General Oral Examination
    - Please note: you must be registered in the semester of the general oral examination to maintain continuous enrollment
- Complete comprehensive exam
    - Note: *On the day of your comprehensive exam, the Graduate School will send your committee the Report on the General Oral Exam.*

After Admission to Candidacy:

Register for at least one credit hour per semester to maintain continuous enrollment

- Both domestic and international students who have completed the General Oral Exam will automatically be enrolled in the GRAD 6AA0/All But Dissertation (ABD) to indicate a full course of study
- Check the Graduate School calendar for deadlines
- Follow the ETD Guide when writing the Dissertation
- Submit the graduation application through AU Access > My Academics > Grad Application (required the semester ***PRIOR*** to the graduating semester)
- Clear all holds and incomplete grades

Dissertation Process:

- Register for at least one credit hour per semester to maintain continuous enrollment
- Submit First Submission Approval Form
    - Note: *Once the First Submission Approval form is approved by the committee, the University Reader will be sent the Dissertation Evaluation Form. Please note that the student and Chair should select the University Reader. University Readers must be Graduate Faculty (Level 0, 1, or 2) and must be outside of the student's department.*
- Submit a PDF of your dissertation to doctoral@auburn.edu for Format Check (required)
- Once the University Reader completes the Dissertation Evaluation, provide information regarding the Final Oral Exam using the link that will be emailed to you.
    - Note: *Once the Dissertation Evaluation Form is submitted to the Graduate School by the University Reader, a link to a form requesting information for the Final Oral Examination will be sent to you. Once submitted, the committee and University Reader will be notified of the final examination date.*
- Complete your final oral exam. On the day of your final oral exam, the Graduate School will send your committee and University Reader the Report on the Final Oral Exam and Publishing Approval Form. Please note: All committee members including the University Reader **MUST** be present at the Defense.
- Submit a Dissertation on AUETD. You must log in on the right-hand side of the screen to access the upload link.
- You must be registered for at least one credit hour in the semester you graduate. Please see the continuous enrollment policy.
- Submit Survey of Earned Doctorates (SED)
- Join the Auburn University Alumni Association

Graduate Student Request To Be Absent

(Must be submitted at least seven days in advance of planned absence)

Graduate Student's Name (Print):_____

Department:_____

Student Appointment Type _____GTA _____GRA _____Not Applicable

Reason for Absence:

_____Personal illness/injury

_____Death in the family

_____Scientific Meeting

_____Other (explain):_____

Dates of Requested Absence:

From_____AM/PM _____
Month Date Year

Through_____AM/PM _____
Month Date Year

_____ _____
Total Hours of Paid Leave Total Hours of Unpaid Leave

_____ _____
Graduate Student Signature Date

_____ _____
Faculty Advisor Signature Date

_____ _____
Graduate Assistant Supervisor Signature (IF APPLICABLE) Date

_____ _____
Department Head Signature Date

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Associate Dean for Research and Graduate Programs Signature

Graduate Courses Available Outside HCOP

Below is the list of some graduate elective courses that DDD students have taken in recent years from different departments outside HCOP. A full list of courses offered by different departments in the Auburn University campus is available in the Auburn Bulletin. The students must discuss with their major advisor if they want to take any of the courses that they take outside the college. https://bulletin.auburn.edu/coursesofinstruction/

BCHE 6180 BIOCHEMISTRY I (3) LEC. 3. Pr. CHEM 2080 or CHEM 2087. Departmental approval. Fundamentals of the classification, structure, and reactions of the major constituents of living matter and evaluation of binding phenomena and bioenergetics.

BCHE 7200 ADVANCED BIOCHEMISTRY I (3) LEC. 3. Graduate credit will not be given for both BCHE 6190 and BCHE 7200.

BCHE 7210 ADVANCED BIOCHEMISTRY II (3) LEC. 3. Structure and function of macromolecules participating in the flow of molecular information. Graduate credit will not be given for both BCHE 6180 and BCHE 7210. Or equivalent.

BCHE 7220 PRINCIPLES OF CELLULAR AND MOLECULAR ENZYMOLOGY (3) LEC. 3. Pr. BCHE 6190 or CHEM 6190 or BCHE 7200. Departmental approval. The principles of enzyme chemistry including the physical, chemical, and catalytic properties of enzymes.

BIOL 6800 INTRODUCTION TO COMPUTATIONAL BIOLOGY (3) LEC. 2. LAB. 1. Pr. STAT 2510 or STAT 2513. Overview of computational approaches to the analysis of biological data. Students will learn basic statistical and graphical analysis. May count either BIOL 5800 or BIOL 6800.

CHEM 7210 STRUCTURE ELUCIDATION OF ORGANIC COMPOUNDS (3) LEC. 3. Pr. CHEM 7200 or CHEM 7220. The early stages of this course will focus on the identification of functional groups, saturated, unsaturated and cyclic compounds using IR and NMR spectroscopy, as well as mass spectrometry. Detailed analyses of 1H NMR spectra, i.e., chemical shift, multiplet shape, and coupling constants will demonstrate the power of these methods in ascertaining atom connectivity in simple organic molecules. More advanced two-dimensional NMR techniques such as COSY, HSQC and HMBC will be discussed and used for determining the structures of more complex organic molecules. The determination of absolute and relative stereochemistry using Mosher ester analyses and NOESY, respectively, in chiral molecules will also be covered. Most of the structures that will be discussed and analyzed will be stereochemically complex systems and polycyclic molecules that require a combination of multiple one-dimensional and two-dimensional NMR techniques.

CHEM 7220 ORGANIC REACTIONS (3) LEC. 3. Pr. (CHEM 2070 or CHEM 2073 or CHEM 2077) and (CHEM 2080 or CHEM 2083 or CHEM 2087). Organic reactions are described in the context of oxidation; reduction; C-C, C-N, C-O bond forming; olefination; aldol (and related) condensations; pericyclic, fragmentation, ring-expansion and ring-contraction reactions; and, named organic reactions and their reaction mechanisms and their application to chemical synthesis. Concurrent enrollment with CHEM 7200 is highly recommended.

CHEM 7530 ADVANCES IN BIOANALYTICAL CHEMISTRY (3) LEC. 3. Pr. CHEM 7500. Analytical Chemistry of microfluidic devices and "Lab on a chip." New methods of miniaturization of separations and analysis with emphasis on bioanalytical applications.

CHEM 7560 MASS SPECTROMETRY: INSTRUMENTATION AND APPLICATIONS (3) LEC. 3. Departmental approval. Several notable developments in mass spectrometry instrumentation platforms have been introduced which has led to significant increase in their implementations to various research and clinical applications. Learning about the fundamental principles of these instrumentation platforms will guide the users in selecting the correct

instrument for a specific application. This course is designed to offer such an approach.

MATL 7630 NANOMATERIALS FOR BIOTECHNOLOGY (3) LEC. 3. Departmental approval. Basic understanding of nanobiotechnology and practical applications in the interdisciplinary fields of Materials Science and Engineering and biotechnology/medicine including nanostructured biomolecules and bioarrays as well as biomolecular nanoelectronics.

PHYS 6600 FRONTIERS OF PHYSICS (3) LEC. 3. A subject from the research areas in the Department such as Solid State, Atomic, Plasma, Space, or Computational Physics will be selected by the lecturer. Course may be repeated for a maximum of 9 credit hours.

PSYC 7270 EXPERIMENTAL DESIGN IN PSYCHOLOGY (4) LEC. 4. Introduction to the analysis of data collected under various different experimental designs. Credit will not be given for both PSYC 7270 and STAT 7270.

STAT 7000 EXPERIMENTAL STATISTICS I (4) LEC. 4. Departmental approval. Paired and independent sample t-tests, ANOVA, F-tests, contrasts, tests for trends, multiple comparisons, CR and RCB designs of experiments, regression.

STAT 7010 EXPERIMENTAL STATISTICS II (3) LEC. 3. Pr. STAT 7000. Advanced topics in experimental design: writing linear models for experiment-expected mean squares, variance components, nested designs, Latin Square Designs, split plot designs, ANOVA and multiple regression.

STAT 7020 REGRESSION ANALYSIS (3) LEC. 3. Pr. STAT 7000. Departmental approval. Introduction to the method of least squares as it applies to regression and analysis of variance. Simple linear regression, multiple regression, model selection and diagnostics.

VBMS 6100 CANCER BIOLOGY & GENETICS (3) LEC. 3. Pr. BIOL 3003 and BIOL 5220. Biological and genetic mechanisms underlying the development of cancer with a focus on eukaryotic cell mechanisms regulating cell division and communication as well as genetic and phenotype instability. State-of-the-art genomic approaches to personalized medicine and immunotherapy will be discussed. Current literature will be used extensively. Undergraduate courses in genetics and molecular genetics are required. Additionally, completion of VBMS 7520 Eukaryotic Molecular Biology is encouraged.

VBMS 7180 RECEPTOROLOGY (4) LEC. 4. Pr. VBMS 7070. Addresses structural and functional aspects of the four classes of receptors, including the mechanism of ligand binding, activation, inactivation, and their relevance to human and animal diseases. Methods used in addressing these questions will also be introduced.

VBMS 7520 EUKARYOTIC MOLECULAR BIOLOGY (3) LEC. 3. Genetic mechanisms regulating genomes and gene expression by which eukaryotic cells replicate, communicate and differentiate. Current literature will be used extensively.

VBMS 7530 EXPERIMENTAL TECHNIQUES IN MOLECULAR AND CELL BIOLOGY (3) LEC. 2. LAB. 6. Nucleic acid detection/amplification/sequencing, primer design, CRISPR, transfection, protein/ antibody chemistry, flow cytometry, immunofluorescence microscopy, fluorochromes, radioisotopes, centrifugation, and cell culture will be discussed.