Department of Chemistry & Biochemistry

Graduate Student Handbook



May 2025

TABLE OF CONTENTS

1.	Introduction		
2.	Graduate Degree Program Requirements		
	A. <u>Admission</u>		
	В.	Onboarding Procedures	4
	C.	Safety and Research Conduct	4
	D.	Choosing a Research Advisor.	5
	Ε.	Advisory Committee	5
	F. Temporary Research Advisor and Advisory Committee		
	G.	Graduate Student Plan of Study	6
	Η.	Registration Procedures	7
	I.	Course Requirements	8
	J.	Grade Requirements	9
	К.	Seminar Requirements	9
	L.	Requirements and Expectations for Graduate Teaching Assistants1	0
	M. <u>Time Limit</u>		
	Ν.	Research Plan Requirements1	2
	0.	Research and Thesis/Dissertation Requirements14	4
	Ρ.	Summary of Examinations1	5
2	C	ducto Tutitico Tellevichine d	~
3.	Gra	aduate Tuition Fellowships1	Э
4.	<u>Eva</u>	luation of Graduate Students1	7
5.	Administration of the Chemistry Department Graduate Program		
6.	International Students, Special Requirements		
7.	Financial Support		
8.	. <u>Generative AI Policy</u>		
9.	• Tutoring Policies		
10.		king Policies	

APPENDIX

Α.	Doctor of Philosophy (Ph.D.) Checklist	. 24
В.	Master of Science (M.S.) Checklist	. 26
C.	Written Research Plan Approval Form Guidelines	. 28
D.	Written Research Plan Scoring Rubric	. 29
	Loan Deferment Request Form	

1. INTRODUCTION

Welcome to the Department of Chemistry and Biochemistry at Auburn University!

For general regulations regarding graduate studies at Auburn University, please check out the <u>Graduate School Bulletin</u>, the <u>AU Graduate Student Handbook</u>, and the <u>General Information page</u> online, or contact <u>The Graduate School</u>:

The Graduate School 106 Hargis Hall Auburn University, AL 36849 (334) 844-4700

This handbook contains only specific information about policies and requirements concerning degrees offered in the Department of Chemistry and Biochemistry (DCB) at Auburn University, and as such, it is designed to be a *supplement* to, rather than a replacement for, the Graduate School Bulletin and AU Graduate Student Handbook. Department specific forms are available on the <u>DCB Forms</u> page of the website, and Graduate School forms are on their <u>Forms Directory</u> page.

Each student is responsible for meeting all the requirements and deadlines specified in the Graduate School Bulletin and in this handbook. Please refer to the <u>Graduate School Calendar</u> for important dates throughout the academic year. If you need assistance with any aspect of the graduate program, your Research Advisor, the Graduate Program Officer (GPO), the Department Chair, and the administrative staff in the Chemistry Building main office are available to help you. If you have any questions, do not hesitate to ask them for assistance.

The checklists in the Appendix of this handbook will help ensure that students meet all requirements in a timely manner as they progress through the graduate program. Students should also refer to the Graduate School's <u>Doctoral Completion Checklist</u> or <u>Master's Completion</u> <u>Checklist</u>.

2. GRADUATE DEGREE PROGRAM REQUIREMENTS

A. Admission

Applicants to the graduate program in Chemistry should have a Bachelor's degree with a major in Chemistry, Biochemistry, or one of their equivalents. The General Test of the Graduate Record Examination (GRE) or the GRE Chemistry Subject Test are not required.

International students must also present satisfactory scores on the Test of English as a Foreign Language (TOEFL iBT) as follows: At least 79 on the internet-based TOEFL (iBT) with at least a 16 on each of the sections of the exam (Listening, Reading, Writing, and Speaking). The International

English Language Testing System (IELTS) exam may be taken in lieu of the TOEFL. The IELTS overall band score required for admission is at least a 6.5.

Please note that the above are *admission* requirements – in order to be eligible for a graduate teaching assistantship (GTA) without taking additional English course(s), an international student must score at least a 23 on the Speaking section of the TOEFL (or for the IELTS, at least a 7.0 on the Speaking section). More details can be found on the Graduate School's <u>website</u>.

Admission Rules, one of the following required:

- TOEFL iBT: at least 79 overall, at least 16 on each of four sections
- IELTS: at least 6.5 overall (no speaking section requirement)
- Degree from accredited college/university in the U.S.
- Degree from a university with English as the primary language of instruction in selected countries (in particular, Nigeria, Ghana, and Kenya). In such a case, the TOEFL/IELTS requirement will be waived upon presenting the "Medium of Instruction" certificate issued by the applicant's university.

Teaching (GTA) Certification Rules, one of the following required:

- TOEFL iBT: at least 23 on the speaking section
- IELTS: at least 7 on speaking section
- iTEP test (administered by AU): at least 4.5 on speaking section
- Degree from accredited college/university in the U.S.
- Degree from a university with English as the primary language of instruction in selected countries, confirmed by a "Medium of Instruction" certificate.
- Special case waiver from Dean of Graduate School
- If none of the above requirements are met, the student will enroll in INTL 1820 (Classroom Communication Skills for International Teaching Assistants) for their first Fall semester, then will become GTA eligible after passing the course.

*Note: The DuoLingo test was temporary allowed during the pandemic, but Auburn University will no longer accept these scores after Fall 2022.

Applications for admission to the graduate program in Chemistry should be submitted online using <u>this link</u>.

Make sure to submit your application *directly* to the Department of Chemistry and Biochemistry to avoid having to pay the application fee levied by the Auburn University Graduate School. All admissions must be approved by both the Chemistry and Biochemistry Graduate Admissions Committee and the Graduate School.

B. Onboarding Procedures

Upon arrival at Auburn University, incoming graduate students will participate in departmental **orientation events** organized by the Graduate Program Officer (GPO) and university events organized by the Graduate School. The departmental events usually begin on or near August 1st of each Fall semester. Orientation schedules will be provided by the GPO to each new class of students, since the schedules differ year-to-year. Students joining in a given Spring semester are typically expected to join orientation events in the next Fall semester.

Several other important onboarding procedures can be found in the department's <u>Onboarding</u> <u>Guide</u>. New and current students are strongly encouraged to consult and follow this document.

C. Safety and Research Conduct

As described by the American Chemical Society (ACS) in their <u>safety policy documents</u>, working with chemicals and developing new materials and chemical processes inevitably involves some degree of risk. To mitigate this risk, a thoughtful and educated approach to chemical safety is of the utmost importance. The Department of Chemistry and Biochemistry (DCB) is committed to ensuring that all students are well-trained in best practices of chemical, biological, electrical, and workplace safety.

New graduate students should complete the following training as soon as possible upon arrival:

- <u>Lab Safety Training</u> (through RMS). This mandatory training needs to be completed annually.
- <u>Managing Regulated Waste Training</u> (through RMS). This mandatory training needs to be completed annually.
- <u>Laboratory Compressed Gas Safety</u> (through BioRAFT). This mandatory training needs to be completed every two years.
- <u>Safe Handling of Cryogenic Liquids</u> (through BioRAFT). This mandatory training needs to be completed every two years.
- <u>Responsible Conduct of Research (RCR) Training</u> (through the CITI program). This training is now required for all graduate students, whether they are working on federally funded projects or not.
- <u>GTA Orientation</u> (through the Biggio Center). This orientation session is required for any graduate student who will be teaching in the classroom or lab.
- <u>Sexual Harassment Prevention Training</u>. This training is required by The Graduate School and Auburn University for all new graduate students.

Before a graduate student may **obtain card swipe access** to the Chemistry Building, they must have completed the mandatory annual Lab Safety and Managing Regulated Waste training offered by AU Risk Management & Safety (RMS), listed above. After a Research Advisor is assigned, and research is set to begin in a specific laboratory, the students must complete additional lab safety training specific to their research group to obtain **key or card access** to their research laboratory. This additional training, as well as a wealth of other information, is compiled in <u>DCB's Research Safety webpage</u>. Once this training is complete, it should be documented on the department's <u>Safety Training Documentation Form</u>, which should be signed by the student and Research Advisor and brought to the chemistry main office to request key/card access to one or more research laboratories.

D. Choosing a Research Advisor

After admission to the Graduate School, students are assigned the Graduate Program Officer (GPO) as a temporary advisor in the Chemistry and Biochemistry Department. In this capacity, the GPO will advise students and help them with registration when they first arrive on campus. During the first semester, each student will be matched with a permanent Research Advisor who will direct the student's Thesis or Dissertation research. The Research Advisor must be a Level 2 member of the Graduate Faculty, and must be mutually agreed upon by the student, the faculty member, and the Department Chair.

To facilitate the advisor selection process, the faculty will give a series of presentations on their research within the first few weeks of the first semester. *New graduate students are required to attend these presentations*, which will help them decide which research groups to join. Once all the faculty have presented, the GPO will give the students a form to fill out to indicate their research group preferences. Students will then interview the faculty with whom they are interested in working, and then have them sign the research group preference form. On the form, students will rank the top three faculty with whom they wish to work, and submit their choices to the GPO and Department Chair in writing. The faculty will then decide who they wish to join their research groups. Note that all student/advisor pairings are subject to approval by the Chair. This process is typically complete by the first week of November in the students' first semester.

E. Advisory Committee

Before the end of the first year of study, students, in consultation with their Research Advisor, should arrange for the appointment of an Advisory Committee. **For Doctor of Philosophy (Ph.D.) students**, the Advisory Committee should be made up of the Research Advisor and at least three faculty members, one of which may be from another Auburn University Department. All committee members must be members of the Auburn University Graduate Faculty. The Research Advisor and at least two of the other faculty must be members of the Graduate Faculty at Level 2. Additional voting members may be appointed to the committee (including no more than one non-Auburn University faculty member, who must hold the terminal degree in the field). After consulting with the Research Advisor and the other faculty that will serve on their committee, students are required to complete and submit the <u>Committee</u>, <u>Transfers</u>, <u>Exceptions and</u> <u>Candidacy (CTEC) Form</u>. The CTEC Form requires all committee members' Auburn University email addresses and the CVs and full email addresses of any outside committee members. This form must be submitted prior to submitting the Request for the Report on the General Oral Examination (see <u>Research Plan Requirements</u> section). When submitting the CTEC form, the student will be prompted to include any transfer courses or curriculum exceptions/substitutions.

These should be discussed with and approved in advance by the committee chair/major professor.

For **Master of Science (M.S.) degree students**, the Advisory Committee should be made up of at least two faculty members in addition to the Research Advisor. The Research Advisor and the majority of the Advisory Committee should be members of the Graduate Faculty. After consulting with the Research Advisor and the other faculty that will serve on their committee, students are required to complete and submit the <u>Committee</u>, <u>Transfers</u>, <u>Exceptions and Candidacy (CTEC)</u> <u>Form</u>. The CTEC Form requires all committee members' Auburn University email address and the CVs and full email addresses of any outside committee members. When submitting the CTEC form, the student will be prompted to include any transfer courses or curriculum exceptions/substitutions. These should be discussed with and approved in advance by the committee chair/major professor.

For either Ph.D. or Master's students, in the event that a change in Advisory Committee becomes necessary, the student must first get approval from the GPO and the Department Chair. The committee membership change should then be emailed to the Graduate School at gradpln@auburn.edu and copied to the GPO at chemgpo@auburn.edu. (Do not resubmit the CTEC form. Your Graduate Advisors will verify and make the necessary updates in Banner.)

Note that the Advisory Committee is taking an active role in the student's annual evaluation process, described below in Section 4, starting from the student's second Fall semester in the program.

F. Temporary Advisor and Advisory Committee

In the event that a graduate student remains unmatched with a Research Advisor at the conclusion of the student's first semester, the Graduate Program Officer (GPO) will remain in place as the temporary advisor, and the Graduate Program Committee (GPC) will serve as a temporary advisory committee. The GPO and GPC will assess the extent to which substandard performance in courses, substandard performance in GTA responsibilities, and/or unprofessional behavior have contributed to an inability to find a research group. In consultation with the student, the GPO and GPC will develop a plan for the student to address deficiencies and engage in a second attempt to identify a Research Advisor. If a student is still unable to find a Research Advisor, the student's assistantship will end at a point not later than the end of the third semester (Summer) in the program.

G. Graduate Student Plan of Study

Following assignment of a Research Advisor, students should consult with their Research Advisor and develop a Plan of Study. The Plan of Study will include the balance of formal graded courses. These should be selected to align with the research project and interests of the student. The Plan of Study will also include a proposed timeline for completing Seminar, Formal Presentations, Directed Individual Study, as well as Research and Dissertation (Ph.D.) or Research and Thesis (M.S.) hours (CHEM 7950, CHEM 7750, and CHEM 8990 or CHEM 7990, respectively). By the end of the first year of study, a formal Graduate Student Plan of Study should be approved by the student's Research Advisor, and then submitted to the Graduate Program Officer. Students are responsible for carrying out their planned program of study and for requesting any changes through the Research Advisor and Graduate Program Officer. Students should *complete* the courses outlined in their Plan of Study at least one term before they intend to graduate.

The <u>Plan of Study Worksheet</u> is available on the <u>DCB Forms</u> page of the website; this is a fillable Excel file, and it includes error messages for the most common errors. In the event that a change in Plan of Study becomes necessary, students should consult with their Research Advisor and the GPO to revise their plan.

H. Registration Procedures

The Graduate Program Officer (GPO) will help students with registration for the first semester of study, typically during the first week of August (or January) at the beginning of orientation. For registration for all subsequent semesters, students will be guided by their individual Research Advisors. Students should carefully read the sections in the Graduate School Bulletin dealing with <u>Registration</u>, and make sure that they consult with their Research Advisor and register for courses before the beginning of each semester. In order to maintain eligibility for GA, GTA, or GRA support, a student *must* be registered for *at least* one credit hour every semester, including summers.

Note that additional credit hours on a semester-by-semester basis may be required for immigration or student-loan deferral purposes. To maintain a valid F-1/J-1 immigration visa status, international graduate students must be enrolled in a full course of study each semester. A full course of study is defined as at least **9 hours each semester in the Fall and Spring but only 1 hour in the Summer semester**. For example, a first-year international student should take at least 19 hours in their first full year (9 in Fall, 9 in Spring, 1 in Summer). More than 9 hours in a given semester is allowed, and the Graduate School allows a maximum course load of 16 hours per semester (14 in the summer term). However, it is not recommended that students carry more than 10-11 hours in a given semester to avoid an undue burden on the student. Commonly, students will enroll in 10 hours in a Fall or Spring semester in which they are enrolled in 3 graded courses (3 hours each) and the graduate seminar course (CHEM 7950, 1 hour).

Once a student has passed the candidacy exam and is conducting research full-time to complete their thesis or dissertation, they will be labeled as "all but dissertation" (ABD) and can be exempt from being full-time (see also <u>Section 3</u>). **ABD students can register for 1 credit hour each semester (Fall, Spring, and Summer)** as they complete their research and dissertation work. Students should not use this exemption for more than four semesters (M.S.) or six semesters (Ph.D.). Any exceptions to this rule will require a letter from the student's Research Advisor.

To be certified as full-time for student-loan deferral purposes, domestic students should submit the <u>GRAD 7@@0/8@@0 Loan Deferment Request</u> form to the Graduate School.

I. Course Requirements

As partial fulfillment of the course requirements, all M.S. and Ph.D. students must complete a <u>Plan of Study</u> approved by their Advisory Committee and the GPO. The Plan of Study is to be filed with the GPO no later than the end of a student's first year in the program. Given that the Plan of Study approval can benefit greatly from the Advisory Committee, students (in consultation with their Research Advisor) should assemble the committee within the third semester in the graduate program, which will normally be the summer after their matriculation. Students in the Ph.D. program are required to complete at least 60 semester hours of graduate course work. Students in the M.S. program are required to complete at least 30 semester hours of graduate course work.

The graduate programs of the Department of Chemistry and Biochemistry are designed to allow students and Research Advisors a great degree of flexibility in determining which courses will compose the Plan of Study. This is so that courses may be tailored to individual students and their interests and goals within the disciplines of chemistry.

A <u>Plan of Study</u> for the **Ph.D. degree** must meet the following requirements:

- At least 60 semester hours total
- At least 30 semester hours that are graded (i.e., A F, not S/U).
- At least 7 formal graded courses (not CHEM 7750 or CHEM 7930)
- At least 6 semester hours of CHEM 7950 (Seminar)
- At least 2 semester hours of CHEM 7750 (Formal Presentations)
- At least 10 semester hours of CHEM 8990 (Research and Dissertation)
- No more than 15 semester hours of CHEM 7930 (Directed Individual Study)

A <u>Plan of Study</u> for the **M.S. degree** must meet the following requirements:

- At least 30 semester hours total
- At least 7 formal graded courses (not CHEM 7750 or CHEM 7930)
- At least 4 semester hours of CHEM 7950 (Seminar)
- At least 1 semester hour of CHEM 7750 (Formal Presentations)
- At least 4 semester hours of CHEM 7990 (Research and Thesis)

Given the wide latitude afforded students and Research Advisors in composing the Plan of Study, it is imperative that the Plan of Study be approved by the Research Advisor and filed with the GPO by no later than the end of a student's first year in the program. In a student's first year, no courses outside the CHEM or BCHE listings are permitted without the written consent of the student's Research Advisor, and following Plan of Study approval, only courses listed in the Plan of Study may be taken. The Department of Chemistry and Biochemistry will not endorse tuition waivers for courses that are not in a student's Plan of Study. Likewise, within the first year, the Department will only endorse tuition waivers for courses that have been approved by the Research Advisor and/or GPO. In the event that **adjustments to the Plan of Study** become necessary (e.g., change of research direction, availability of a new course, etc.), an amendment

can be undertaken through consultation with your Research Advisor and formalized by submitting a revised Plan of Study (using the <u>Excel sheet</u>) to the GPO.

For either Ph.D. or Master's students, in the event that a **change in Advisory Committee** becomes necessary, the student must first get approval from the GPO and the Department Chair. The committee membership change should then be emailed to the Graduate School at gradpln@auburn.edu and copied to the GPO at chemgpo@auburn.edu. (Do not resubmit the CTEC form. Your Graduate Advisors will verify and make the necessary updates in Banner.)

J. Grade Requirements

M.S. and Ph.D. students are expected to maintain a grade point average (GPA) of 3.0 or better (on a 4.0 scale). This is the standard established by the Graduate School. Procedures for academic probation and academic suspension will be carried out as prescribed by the Graduate School. Grades below "C" will not be accepted for graduate credit. If at the end of any semester the cumulative graduate GPA falls below 3.0, the student will be placed on academic <u>probation</u>. Students on academic probation do not receive a tuition waiver. If the GPA 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 <u>suspension</u> 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. Failure to complete the remediation plan will result in academic <u>dismissal</u>. For more details, see the Graduate School's academic probation and suspension policy <u>here</u>.

The Graduate School has also devised an Academic Bankruptcy Policy for students that are attempting to reestablish their academic standing after being suspended or expelled. Academic bankruptcy allows the student to petition their program, department, and the Graduate School to restart their graduate program after a minimum of a one calendar year separation from Auburn University. For more details, refer to the Graduate School's general policies <u>here</u>.

K. Seminar Requirements

Ph.D. students are required to take two semesters of Formal Presentations in Modern Chemistry (CHEM 7750). The primary requirement of this course is to present a formal seminar for a grade. M.S. students are required to take one semester of CHEM 7750. Ph.D. and M.S. students are also required to give a final seminar on their dissertation or thesis research, respectively. The final seminar will be presented to the entire Department immediately before the Final Oral Dissertation or Thesis Defense.

Ph.D. students are also required to register for one hour of seminar credit (CHEM 7950) in each of six semesters prior to graduation. M.S. students are required to register for one hour of seminar credit in each of four semesters prior to graduation. Students will be graded on attendance at the departmental colloquia.

L. Requirements and Expectations for Graduate Teaching Assistants

The vast majority of incoming Ph.D. and M.S. students receive support in their first year through a Graduate Teaching Assistantship (GTA), which includes a stipend (currently about \$30,000 per year) and a full <u>tuition waiver</u>. In subsequent years and at the discretion of the Research Advisor, a student may be put on a Graduate Research Assistantship (GRA), provided that extramural funds are available; the GRA support includes the stipend and tuition waiver, but allows the student to focus mostly on their research. Students without GRAs must serve as GTAs in order to receive financial support and a tuition waiver through the Department of Chemistry and Biochemistry. GTAs are typically required to help teach undergraduate laboratory or lecture courses, as well as help with grading and proctoring undergraduate lecture courses as part of grading teams.

The relative proportion of support a student will receive by GTA and GRA will be determined by the Research Advisor prior to the start of each semester. However, the teaching, grading, and proctoring assignments are made by the Director of Instructional and Research Labs (DIRL) in consultation with the lab managers. The assignments are based on <u>expected hours worked</u>, not on the number of lab sections and grading teams, as not all lab sections are equal in workload. A full teaching load is considered to be 20 hours of work per week. A GTA's assignment generally consists of a combination of any number of lab or lecture sections and grading teams, adding up to the total number of expected hours worked.

GTAs report directly to the lab manager(s) or instructor(s) in charge of the labs/classes to which they are assigned.

As a GTA, students are required to meet the following expectations. Failure to meet these expectations could lead to the student losing their teaching assistantship.

- Provide an accurate availability schedule. GTAs will be asked to fill out a "TA Preference and Availability Form" prior to each semester. GTAs must provide the DIRL with their upcoming schedule that includes <u>ALL</u> classes, seminars, and group meetings that they will be attending.
- 2. <u>Attend GTA training sessions, and be prepared to teach the lab/class.</u> Safety is the number one priority in the labs. If GTAs are unprepared or unfamiliar with the experiments, this creates risks to the safety of the undergraduate students and the GTA(s).
- 3. <u>Arrive on time to teach.</u> GTAs should arrive at least 5-10 minutes prior to the start of lab/class so that they will be ready to teach when their students arrive.
- 4. Inform the lab manager/instructor at the earliest possible time of an inability to cover a teaching, grading, or proctoring assignment. Unexcused absences are not permitted. The GTA should make arrangements with their lab manager/instructor to ensure that the missed assignment is covered.
- 5. <u>Wear appropriate lab attire and personal protective equipment (PPE).</u> Proper lab attire means long pants, sleeved shirts, and closed-toed shoes. No shorts/skirts/leggings or opentoed shoes will be allowed. Long hair should be tied back. Wear appropriate PPE, such as safety glasses and a lab coat. Set a good example and enforce safe laboratory practices.

- 6. <u>Actively help the students.</u> GTAs should walk around to check on their students to make sure they are doing things correctly, to answer their questions, provide explanations, and help them with their experiments.
- 7. <u>Be attentive</u>. GTAs should not be engaged in other activities (e.g., using a phone or laptop) while they are teaching. A GTA's main responsibilities are to teach the students and to ensure that they are being safe.
- 8. <u>Proctor and grade.</u> GTAs should attend any and all grading team meetings, arrive on time to proctor and grade, and inform the instructor at the earliest possible time of an inability to cover a proctoring or grading assignment. GTAs should make arrangements with the instructor to ensure that the missed assignment is covered.

Graduate students will be <u>evaluated</u> by their lab managers/instructors for each semester they serve as GTAs. The evaluations will be used by the GPO in the student's annual review and will also be submitted to the Graduate School. If a lab manager/instructor finds that a GTA is not meeting expectations, there will be progressive disciplinary consequences:

- 1. The student will receive up to three **verbal warnings**. Serious violations (e.g., safety, insubordination, etc.) will result in an immediate formal written warning and could lead to the termination of the student's GTA position.
- 2. If the student's performance does not improve after verbal warnings, a formal **written warning** will be recorded, sent to the Department Chair, and placed in the student's file with the GPO.
- 3. A final written warning will be given before a decision is made about whether or not to **terminate** the student's GTA position.

If a student's GTA position is terminated, they will no longer receive financial support through the Department of Chemistry and Biochemistry, and they will lose their <u>tuition waiver</u>.

M. Time Limit

Ph.D. students will be allowed a maximum of five years on GTA support, while M.S. students will be allowed a maximum of three years on GTA support. Note that M.S. students have four years to complete their thesis and graduate, or change to Ph.D. status – they will be allowed to receive a teaching assistantship during their fourth year only if they have applied and have been accepted into the Ph.D. program prior to the start of their fourth year.

Exceptions to these rules can be granted by a majority vote of the Graduate Program Committee and approval of the Department Chair. In the event that the Department is in need of GTAs, students who have exceeded their GTA eligibility can be hired on a semester-by-semester basis without a special vote of the Graduate Program Committee.

Transition from the Masters program to Ph.D. Candidacy

Students who wish to make the transition from the Master's program to the Ph.D. program will need to pass the <u>General Doctoral Examination</u>. This exam, which is required by the Graduate

School for admission to candidacy for the Ph.D. degree, consists of a written component (Research Plan) and an oral component (oral defense). See <u>below for the Research Plan</u> <u>Requirements</u> section.

Transition from the Ph.D. program to the Master's program

Although this occurs infrequently, a student and their Research Advisor may decide that the best course of action is to transition from the Ph.D. program to the Master's program. In this case, the student should fill out a Curriculum Change Form with the Graduate School. This form is different for domestic and international students, and it can be found on the Graduate School's <u>Forms</u> <u>Directory</u> page.

N. Research Plan Requirements

Ph.D. students are required to write a Research Plan and submit it to their Advisory Committee for evaluation and approval. An approved Research Plan fulfills the written component of the General Doctoral Examination. The Research Plan will be graded by the student's Advisory Committee on an Unsatisfactory/Satisfactory/Exceptional basis. The DCB Forms page includes a link to the <u>Written Research Plan Approval Form</u> along with a <u>Guidelines and Scoring Rubric</u> document. To pass this written component of the General Doctoral Examination, a student's Research Plan must receive a grade of at least Satisfactory from no less than three fourths of the members of the Advisory Committee.

A summary of the procedure is provided here, with more details included below.

- 1. To initiate the process, the student should provide the written Research Plan to their Advisory Committee.
- 2. Next, the student should fill out the Written Research Plan Approval Form (Qualtrics).
- 3. Email the Advisory Committee, including a link to the <u>Written Document Evaluation Form</u> (Qualtrics). Note that a draft email will be provided by the Qualtrics form from #2 (above).
- 4. Assuming the written component was passed, the student should schedule the General Oral Examination with the Advisory Committee. Students must also fill out the Graduate School's <u>Request for the Report on the General Oral Examination</u> online.
 - a. If the written component was unsatisfactory (U), revise the document and return to #1 above.
- 5. Success or failure in Ph.D. candidacy will be decided by the Advisory Committee.

These are the minimum requirements for the Research Plan:

• The document shall be no fewer than 10 pages and no more than 20 pages. These page limits include figures, graphs, and tables, but they do not include the cover page, references, or evaluation page. Page margins are to be 1" on each side, and the text is to be double-spaced, using 12-point font.

- A link to the <u>Written Document Evaluation Form</u> should be included on the document's cover page to direct the Advisory Committee to the appropriate form.
- The Research Plan is to have the following sections. (Note: section page lengths are provided as a guide; individual Research Plans may vary).
 - Overview and Research Goals (1 3 pages)
 - Background and Significance (3 4 pages)
 - Preliminary Data (1 3 pages) can be combined with Background and Significance
 - Experimental Plan (5 10 pages)
- Each Research Plan will be evaluated on the basis of two main criteria: *scientific content* and *writing quality*. Scientific content includes knowledge of the subject area (significance, background literature, etc.), research plan coherence, and technical expertise. Writing quality addresses the clarity of writing, the quality of figures, and the proper use of source material. Students are referred to the <u>Guidelines and Scoring Rubric</u> document for additional details on each of these criteria.
- A research proposal written in the style of one submitted to an extramural agency (e.g., the Project Description of an NSF proposal) is an acceptable format for the Research Plan. The document must still meet the overall length/margin/font-size requirements above. It is the decision of the Research Advisor to require a student to produce a proposal-style Research Plan. When the Research Advisor sets specific requirements, he or she is to communicate in writing to the student and the Advisory Committee the specifics of the expected format (e.g., agency, sections, and other specific requirements not stipulated above).

Additional Guidelines:

- As with any research plan, preliminary data are desirable, and students are encouraged to
 engage in the research of their laboratories to the greatest extent possible upon joining a
 group. However, students, advisors, and committees should bear in mind *that the purpose of
 the Research Plan is not to report large quantities of preliminary data*. A satisfactory or
 exceptional plan can be produced with relatively few preliminary results. Given that the
 Department strongly recommends that the initial Research Plan be submitted within five
 semesters (including Summers) in the Ph.D. program (i.e., only four semesters in the
 laboratory), expectations for preliminary results should be scaled accordingly.
- Although students are permitted to consult with their Research Advisors during the preparation of their research plans, the *Research Plan is to represent the ideas and writing of the student, not the advisor*. Good models of student-advisor interaction in this context would be that of a proposal writer to a funding agency program officer, and the level of input from advisor to student similar to that of a manuscript's reviewer to its corresponding author.
- Plagiarism is a serious breach of scientific integrity. Passing off the work of others (your advisor, other scholars, and/or other students) as your own in the Research Plan is grounds for failure of the written component of the General Doctoral Examination.

If a Research Plan is judged to have **passed** the written component of the General Doctoral Examination (i.e., at least satisfactory from at least three fourths of the committee), the student, in consultation with the Advisory Committee, will **schedule the General Oral Examination**. Students must fill out the <u>Request for the Report on the General Oral Examination</u> online. Note that the Graduate School requires one week between completion of the application and the time of the oral exam.

If a Research Plan is judged **unsatisfactory** by more than one fourth of the Advisory Committee, a student may revise and resubmit the plan for reevaluation by the Advisory Committee Committee (i.e. start again at #1 in the <u>summary list</u> above). Provided the revision/reevaluation process can be completed within the time limit for achieving Ph.D. candidacy (see below), a student will have up to two opportunities to revise and resubmit the plan for reevaluation. If a revised Research Plan is judged to have passed, as above, the student will proceed to schedule the General Oral Examination.

If the third version of the Research Plan still receives an Unsatisfactory grade from more than one fourth of the Advisory Committee, the student will have failed the written component and will not proceed forward to the General Oral Examination. As such, the student will have failed the General Doctoral Examination and will not advance to Ph.D. candidacy. A student who fails to advance to candidacy may apply his or her research progress toward a Master's Thesis. What constitutes a complete Master's Thesis project shall be the determination of the Research Advisor and Advisory Committee. In terms of time limits for obtaining the Master's Degree, the starting point will be the semester of original matriculation into the Department of Chemistry and Biochemistry.

<u>Time Limits</u>

As stated above, a student may have up to two opportunities to revise and resubmit an unsatisfactory Research Plan for reconsideration by the Advisory Committee. However, it must be borne in mind that the deadline for achieving candidacy (i.e., passing both the written and oral components of the General Doctoral Exam) is the end of the seventh semester (including Summers) in the program. Students are advised to plan accordingly. It is strongly recommended that students write and submit a Research Plan within their fifth semester (including Summers) in the program.

O. Research and Thesis/Dissertation Requirements

The Ph.D. degree requires the student to write a dissertation based on original research on a significant problem in chemistry or biochemistry. Students are required to give their Advisory Committee at least fourteen days to review their dissertation. Upon approval by the Advisory Committee, the student can submit the approved draft of the dissertation to the Graduate School for assignment of an *outside reader* (University Reader), a faculty member outside the department that is usually selected through consultation with the student's Research Advisor. Upon approval by the Graduate School, students can then write up the final draft of the dissertation and arrange a date and time for the Final Seminar (see <u>Seminar Requirements</u>

section), with the Final Oral Examination to follow immediately after. The successful defense of the written dissertation in front of the Advisory Committee fulfills the oral component of the Final Doctoral Examination. For more general information on dissertation requirements, refer to the Graduate School's <u>guide on thesis and dissertation requirements</u>, the <u>checklist</u> in the Appendix of this document, and the Graduate School's <u>Doctoral Completion Checklist</u>.

The M.S. degree requires the student to write a thesis based on original research carried out by the student. The thesis content must be approved by their Research Advisor and the rest of the Advisory Committee. Students are required to give their Advisory Committee at least fourteen days to review their thesis. Upon approval, students can then write up the final draft of their thesis and arrange a date and time for the Final Seminar, with the Final Oral Examination to follow immediately after. The successful defense of the written thesis in front of the Advisory Committee fulfills the oral component of the Master of Science Thesis Examination. For more general information on thesis requirements, refer to the Graduate School's <u>guide on thesis and</u> <u>dissertation requirements</u>, the <u>checklist</u> in the Appendix of this document, and the Graduate School's <u>Master's Completion Checklist</u>.

P. Summary of Examinations

All Ph.D. students must take the following examinations:

- 1. The General Doctoral Examination: The General Doctoral Examination (also known as the "preliminary examination" or the "qualifying examination") is required by the Graduate School for admission to candidacy for the Ph.D. degree. The exam, which should be completed by the end of the seventh semester (including Summers) of study, consists of two parts written and oral. To fulfill the written part of the General Doctoral Examination, students must write up a Research Plan that is approved by their Advisory Committee (see <u>Research Plan Requirements</u> section), then fill out the department's <u>Written Research Plan Approval Form</u> (Qualtrics). As a reminder, upon approval of the Research Plan, students must fill out the <u>Request for the Report on the General Oral Examination</u> online to schedule the oral exam. Note that the Graduate School requires one week between completion of the application and the time of the oral exam. To fulfill the oral part of the exam, students must successfully defend their Research Plan in front of their Advisory Committee. Students who fail to pass the General Doctoral Examination will be dropped from the Ph.D. program, but will be given the opportunity to write up the research work they have already completed and submit it in partial fulfillment of the requirements for the M.S. degree.
- 2. The Final Oral Examination: Students may apply to take the Final Oral Examination once they have completed the first draft of their dissertation and their Advisory Committee has approved it. An application to take the Final Oral Examination must be made to the Graduate School by submitting a <u>Dissertation First Submission Approval Form</u> (see the Forms Directory). Immediately preceding the Final Oral Examination, students are required to present the results of their dissertation in a departmental seminar (Final Seminar). The Final Oral Examination will include a defense of the dissertation and may include an examination in

their field of specialization. Re-examinations are usually not allowed – but if allowed, they must be approved by the Advisory Committee.

All M.S. students must take the following examination:

The Final Oral Examination: Students may apply to take the Final Oral Examination once they have completed the first draft of their thesis and their Advisory Committee has approved it. An application for the Final Oral Examination must be made to the Graduate School by submitting a <u>Thesis Master's Final Examination Form</u> (see the <u>Forms Directory</u>). Immediately preceding the Final Oral Examination, students are required to present the results of their thesis in a departmental seminar (Final Seminar). The Final Examination will consist of an oral defense of the student's thesis. Re-examinations are usually not allowed – but if allowed, they must be approved by the Advisory Committee.

3. GRADUATE TUITION FELLOWSHIPS

University-funded in-state tuition support will be limited to 110% of the number of hours required for a graduate degree. Exceptions to this limit can be provided with documentation of the academic need, and demonstration of good stewardship of the support already provided, with the approval of the Graduate Dean. The Department of Chemistry and Biochemistry has been granted an exception that allows up to 75 hours for the Ph.D. degree, although students are encouraged to stay closer to the 60-hour requirement if possible. Tuition support will be provided for one of the following:

- One M.S. degree or recognized dual-degree M.S. program.
- One Ph.D. degree.
- One M.S. degree plus one Ph.D. degree within the same or complementary field.

University-funded full tuition support will only be provided to graduate assistants receiving a 0.33 or higher FTE (at least 13 hours/week) assistantship for each semester during the academic year. Those with 0.25-0.32 FTE (10 to under 13 hours/week) assistantships will receive 50% tuition support. Those with less than 0.25 FTE (less than 10 hours/week) will not be provided tuition support. Graduate students with at least 0.25 FTE assistantships will continue to be classified as in-state residents for the purposes of determining tuition charges. Graduate assistants who have received a 0.33 FTE or higher assistantship for both Fall and Spring semesters of a given academic year will receive tuition support during the corresponding Summer semester.

Domestic Students Nearing Completion of Their Graduate Degree:

As a student nears completion of their graduate degree program, they may submit to the Graduate School the <u>GRAD7@@0/GRAD8@@0 Loan Deferment Request</u> form to certify that they are considered full-time for financial aid qualification and for loan payback deferment purposes, even when they are enrolled in less than 9 hours per term. Students must submit this form to the Graduate School at least 12 days before the first day of classes.

International Students Nearing Completion of Their Graduate Degree:

As an international student holding an F-1 or J-1 visa nears completion of their graduate degree program, it is important to carefully track the total number of credit hours, because there is an upper limit (75 hours) that **could affect their immigration status**. Once a student has passed the candidacy exam and is conducting research full-time to complete their thesis or dissertation, they will be labeled as "all but dissertation" (ABD) and can be exempt from being full-time (see <u>Registration Procedures</u> section). An ABD student should register for 1 credit hour (usually CHEM 8990) each semester as they complete their research and dissertation work, and the Graduate School will automatically sign the student up for GRAD 6AA0. This is a non-credit course that identifies the students as having a full course load, which will classify them as full-time students. Students should not use this exemption for more than four semesters (M.S.) or six semesters (Ph.D.). Any exceptions to this rule will require a letter from the student's Research Advisor.

Note that the "Gold Form," which was previously required in such cases, no longer exists as an official form at Auburn University.

4. EVALUATION OF GRADUATE STUDENTS

Each student's progress with regard to course work, research, teaching, professionalism, and professional development will be <u>evaluated</u> annually. The student will be given a copy of the evaluation. Students are expected to use this as an opportunity to discuss with their Advisory Committees their assessment of their own professional growth, as well as research or course opportunities they would find beneficial in their paths toward their degrees and their careers thereafter. Likewise, this is an opportunity for the Advisory Committee to provide feedback along similar lines, in addition to monitoring progress with respect to program milestones.

Doctoral Student/Candidate Annual Evaluation: Each Ph.D. student/candidate will be evaluated on an annual basis in a face-to-face or virtual meeting with the student/candidate's Research Advisor **and** Advisory Committee, starting from the student's second Fall semester in the program. The evaluation procedure shall be composed of three steps:

- At least one week in advance of the annual evaluation meeting, the student/candidate will provide their Research Advisor and Advisory Committee with a brief Annual Summary report (not more than two pages; prose or bulleted style) summarizing the progress of the past year and putting forward the anticipated goals for the coming year.
- The student/candidate will fill out the student-specific sections of the <u>Doctoral</u> <u>Student/Candidate Annual Evaluation</u> form (Qualtrics form on <u>DCB Forms</u> page) to initiate the evaluation process. The system will send an automatic email to the Research Advisor to initiate Step #4 (below).
- 3. The student/candidate, Research Advisor, and Advisory Committee (at least 3 faculty in total) will **meet** to discuss the report and provide feedback. Either in-person or virtual meetings are permitted. Often, these meetings will last between 30 minutes to 1 hour.

4. The Research Advisor will complete the advisor-specific sections of the <u>Doctoral Student/Candidate Annual Evaluation</u> form (Qualtrics form on <u>DCB Forms</u> page), including the Advisory Committee's finding of satisfactory or unsatisfactory progress toward the degree and a summary of the committee's observations and recommendations. Upon completion, a copy of the evaluation will be automatically sent to the student/candidate, the Advisor, and the GPO. The GPO will furnish a copy of the evaluation to the Graduate School for their yearly program assessments.

These annual evaluations must be turned in to the Graduate Program Officer by **November 30** of each year. If a student's performance is deemed unsatisfactory, the Advisory Committee will formulate improvement goals that need to be fulfilled within the current academic year. Two unsatisfactory evaluations may lead to the student's dismissal from the program.

Teaching: Graduate Teaching Assistants will be <u>evaluated</u> by their Laboratory Managers and Instructors according to the expectations outlined in the section on <u>Requirements and</u> <u>Expectations of Graduate Teaching Assistants</u>. GTAs will receive copies of these evaluations. The results of the evaluations will also be submitted to the Graduate School.

In cases where there is a noticeable lack of research progress, unsatisfactory teaching, unprofessionalism, or unsatisfactory professional development, the student's Advisory Committee and/or the Graduate Program Committee may request reports at the end of subsequent semesters. If there is continued, long-term lack of progress, unsatisfactory teaching, unprofessionalism, or unsatisfactory professional development, the student's Advisory Committee and/or the Graduate Program Committee may recommend termination of the student's teaching assistantship.

5. ADMINISTRATION OF THE CHEMISTRY DEPARTMENT GRADUATE PROGRAM

The graduate program is administered by the **Graduate Program Committee**. The Graduate Program Officer (GPO) serves as the chair and as a continuing member of the Graduate Program Committee, as well as the liaison to The Graduate School and advisor to the new graduate students.

The Chemistry & Biochemistry Department has four committees that include a **graduate student representative**: Graduate Program, Graduate Recruiting, Safety, and Seminar. Each graduate student representative will be elected by their peers using a departmental survey, and they will be assigned to one of the four committees by the Department Chair. In addition to participation in their respective committees, these graduate student representatives will also act as liaisons between department leadership and the graduate students.

The primary role of a graduate student representative is to help foster better and more open communication between the Faculty and the graduate students. Their role is to observe, learn, and provide input from a graduate student's perspective. Graduate student representatives are

not official committee members, and as such, should not be asked to perform any duties of the committees to which they are assigned.

6. INTERNATIONAL STUDENTS, SPECIAL REQUIREMENTS

The <u>Office of International Programs</u> (OIP) is responsible for assisting international students with visa matters and other international student requirements. The International Student Advisor is located at the OIP in Foy Hall. The Department of Chemistry and Biochemistry (DCB) is particularly interested in the special policies listed below:

- All international students whose native tongue is not English must score a minimum of 79 on the internet-based TOEFL (iBT), including a minimum score of 16 on each section of the exam (Reading, Listening, Writing, Speaking), or a minimum 6.5 overall band score on the IELTS, to be **admitted** to the Graduate School. Please note that requirements for international students to be eligible to receive GTA positions are more stringent (see <u>Section 7, item 4</u>).
- 2. All international students are required to have comprehensive medical insurance for themselves and their dependents while attending Auburn University. Auburn University automatically enrolls all international students and charges a modest fee.
- 3. A U.S. driver's license and personal liability insurance are required for the operation of any private vehicle in Alabama.
- 4. Off-campus employment is specifically prohibited during the first 12 months in F-1 student status. After one year, an F-1 student may apply to the Immigration and Naturalization Service for off-campus employment if they can demonstrate an economic necessity due to unforeseen circumstances, arising subsequent to entering the U.S. *The Department prohibits outside employment while on a full-time teaching assistantship or research assistantship* (0.33 FTE or more for a semester, or 1.0 FTE for a year).
- 5. An F-1 student may accept employment at the institution which they are authorized to attend without prior approval of the Immigration and Naturalization Service. This employment requires that the student is enrolled in a full course of study, and that the student is in good academic standing. On-campus employment is limited to a maximum of 20 hours per week. For students with less than a full-time GTA or GRA, employment outside the Department is allowed but not encouraged. Seeking employment outside the Department requires written permission from the student's Research Advisor and the Department Chair.
- 6. Any F-1 student who has completed one educational program and who desires to complete another educational program at the same level (e.g., a second M.S. degree) must apply for an extension of stay.

7. FINANCIAL SUPPORT

Graduate students receiving Graduate Teaching Assistantships (GTA) or Graduate Research Assistantships (GRA) must accomplish the following as soon as possible after arriving on campus:

- 1. *International Students:* Complete application (in person) for a **Social Security Number** at the local **Social Security Administration** office.
- 2. Complete Federal and State Income tax withholding information. Forms will be available in the Payroll Office.
- 3. Complete an Auburn University Personal Data Form.
- 4. In order to be eligible for a GTA position, all graduate students whose native tongue is not English must achieve **one** of the following:
 - 1) A Bachelor's degree from a program in selected countries whose language of instruction is English;
 - 2) A score of at least a 23 on the Speaking portion of the TOEFL;
 - 3) A score of at least a 7.0 on the Speaking portion of the IELTS;
 - 4) A score of at least 4.5 on the speaking section of the on-campus ITEP test;¹
 - 5) A grade of Satisfactory in the INTL 1820 (Classroom Communication Skills for International Teaching Assistants) course.

¹ The ITEP test is administered by the English as a Second Language (ESL) program during Graduate Student Orientation in the two weeks prior to the beginning of each Fall and Spring semester.

8. GENERATIVE AI POLICY

The Department of Chemistry and Biochemistry is committed to fostering a culture of ethical scholarship. The recent advances in generative AI (GPT-4, ChatGPT, CoPilot, Midjourney, etc.) offer important benefits to the research community but come with a new set of ethical challenges. The ability to use generative AI in an ethical manner is an important skill expected of the current Ph.D. graduates. Therefore, the Department's policy on generative AI is driven by our commitment to educating students on its benefits and ethical issues. We intend to emphasize *the right things to do* more than *the allowed things to do*.

A student can utilize generative AI in the process of preparing their written documents (research proposal, thesis, or dissertation) *only when all these four conditions are met*:

- 1. The student has obtained express approval from their Research Advisor prior to using generative AI.
- 2. If AI is used, the student clearly states in the written document (article, dissertation, research report, etc.) which generative AI algorithm(s) were used and for which specific purposes.
- 3. The use of generative AI to create or enhance images is not recommended due to potential copyright violations. It is the student's responsibility to ensure that an AI-created image does not derive from any copyrighted works.
- 4. In accordance with the Auburn University policy, no actual research data can ever be submitted to a generative AI system. This includes raw data (numbers, tables, graphs), processed data, their interpretation and discussion, and novel research questions or ideas. What constitutes "research data" is often difficult to determine, so as a general rule, when communicating with your advisor (point 1 above), clearly indicate when you plan to input anything related to your research projects into AI.

The student is ultimately responsible for ensuring that the written document is factually correct and does not contain plagiarism or fake references. Therefore, one needs to carefully examine the AI-generated text and correct any issues.

A breach of the generative AI policy constitutes a serious violation of academic integrity. A student who has violated this policy might incur various consequences up to and including dismissal from the graduate program.

9. TUTORING POLICIES

Graduate students are allowed to engage in tutoring. However, graduate students <u>may not tutor</u> undergraduate students who are taking classes/labs to which the graduate student has been assigned as a teaching assistant or proctor/grader. One mechanism graduate students can use to indicate their availability to tutor departmental courses is to sign up on the Department of Chemistry & Biochemistry's "tutor list". This can be done in the Chemistry Building main office.

10. PARKING POLICIES

Parking rules and regulations for students can be found in the <u>Student Policy eHandbook</u> and on the <u>Parking Services Traffic Rules & Regulations webpage</u>. All commuter graduate students are eligible for a C-zone parking permit, and vehicle registration should be completed through AU Access (registration details <u>here</u>). Each year, there are a limited number of B-zone parking permits that are given to graduate students that demonstrate a special need to support their teaching and/or research. The GPO collects this information into a single document, then the Department Chair submits the document to the Graduate School. The deadline for receiving these requests is June 30 of each year, preceding the upcoming academic year. The GPO has created a Qualtrics form, <u>Request for B-zone Parking Permit</u> for this purpose, and this form will generally be open for submissions in May-June of each year. Please note that these are simply requests, thus there is no guarantee that a student will receive a B-zone permit. The final selection process is controlled by the Graduate School.

APPENDIX

CHECKLIST – DOCTOR OF PHILOSOPHY STUDENTS

Deadlines	Important Action Items
First Year 1 st week of August/January	Plan a schedule of study for the first semester with the Graduate Program Officer (GPO) and register for courses.
First Year By end of 1 st semester	Select a Research Advisor.
Each semester (See <u>Graduate School</u> <u>Calendar</u>)	Consult with your Research Advisor and Plan of Study (if applicable) and register for courses before the beginning of each semester.
	 Once per year, consult with Research Advisor and Committee to initiate and complete the DCB <u>Annual Evaluation Form</u>. (First-year students are exempt.)
First Year Early in 2 nd semester	In consultation with your Research Advisor, select a research Advisory Committee and complete the <u>CTEC Form</u> online.
First Year End of 2 nd semester	In consultation with your Research Advisor, submit a <u>Plan of</u> <u>Study Worksheet</u> to your Advisory Committee and the GPO.
Second Year	Continue working on completing course and credit hour requirements as defined by your approved Plan of Study.
Second Year	Write up a Research Plan and submit it to your Advisory Committee for approval. Students should initiate the candidacy process using the <u>Written Research Plan Approval Form</u> . An approved Research Plan fulfills the written component of the General Doctoral Examination.
Second Year	□ Upon Research Plan approval (by the committee using the <u>Written Document Evaluation Form</u>), arrange with your Advisory Committee a mutually agreeable date/time for your General Oral Examination. Submit the <u>Request for Report on the General Oral</u> <u>Exam</u> form to the Graduate School. (Must be submitted at least one week before the date of the Oral Exam.)
	Continued on next page

Deadlines	Important Action Items	
Second Year	Defend your Research Plan in front of your Advisory Committee. A successful defense fulfills the oral component of the General Doctoral Examination.	
Third Year	Continue working on completing course and credit hour requirements as defined by your approved Plan of Study.	
Fourth Year +	Complete all course and credit hour requirements as defined by your approved Plan of Study.	
Fourth Year +	Complete original research.	
Fourth Year +	Write up a complete draft of your dissertation and submit it to your Advisory Committee for approval.	
Fourth Year +	 Consult with your Research Advisor to select a University Reader (Outside Reader) from a different department on campus 	
Fourth Year +	Submit Dissertation First Submission Approval Form to the Graduate School.	
Fourth Year + One term before you plan to graduate	Apply to graduate through <u>AU Access</u> (Graduation Application) and inform the GPO and DIRL of your impending graduation.	
Fourth Year + The term you plan to graduate	Submit PDF of your dissertation to <u>doctoral@auburn.edu</u> for Format Check.	
Fourth Year +	Schedule your Final Oral Examination.	
Fourth Year +	Defend your dissertation in front of your Advisory Committee an University Reader.	d
Fourth Year +	Ensure that your Advisory Committee completes the online form (via SmartSheet) for the Report on the Final Oral Exam.	S
Fourth Year +	Submit signed Electronic Thesis/Dissertation Final Approval Form to the Graduate School.	١
Fourth Year +	Submit your dissertation on <u>AUETD</u>	
Fourth Year +	Submit the <u>Survey of Earned Doctorates</u> (SED)	

CHECKLIST – MASTER OF SCIENCE STUDENTS

Deadlines	Important Action Items
First Year 1 st week	Plan a schedule of study for the first semester with the Graduate Program Officer (GPO) and register for courses.
First Year By end of 1 st semester	Select a Research Advisor.
Each semester (See <u>Graduate School</u> <u>Calendar</u>)	Consult with your Research Advisor and register for courses before the beginning of each semester.
First Year Early in 2 nd semester	In consultation with your Research Advisor, select a research Advisory Committee and complete the <u>CTEC Form</u> online.
First Year By end of 2 nd semester	In consultation with your Research Advisor, submit a <u>Plan of</u> <u>Study Worksheet</u> to your Advisory Committee and the GPO.
Second Year	Continue working on completing course and credit hour requirements as defined by your approved Plan of Study.
Third Year	Complete all course and credit hour requirements as defined by your approved Plan of Study.
Third Year	Complete original research.
Third Year	Write up a complete draft of your thesis and submit it to your Advisory Committee for approval. An approved written thesis fulfills the written component of the Master of Science Thesis Examination.
Third Year One term before you plan to graduate	Apply to graduate through <u>AU Access</u> (Graduation Application) and inform the GPO and DIRL of your impending graduation.
	Continued on next page

Deadlines	Important Action Items
Third Year The term you plan to graduate	Submit PDF of your thesis to <u>thesis@auburn.edu</u> for Format Check.
Third Year	Schedule your Final Oral Examination. The successful defense of your written thesis fulfills the oral component of the Master of Science Thesis Examination.
Third Year	Defend your thesis in front of your Advisory Committee.
Third Year	Submit <u>Request for Report of Master's Thesis Final Exam</u> .
Third Year	 Ensure that your Advisory Committee completes the online forms (via SmartSheet) for the Report on the Final Oral Exam.
Third Year	□ Submit your thesis on <u>AUETD</u>

Written Research Plan Approval Form Guidelines (updated July 2022) Department of Chemistry and Biochemistry

A written research plan is required by each Ph.D. student to fulfill the written component of his or her General Doctoral Exam. According to the Graduate Student Handbook, upon receipt of a written research plan each member of a graduate student's advisory committee is to evaluate the document and return a grade of *Exceptional, Satisfactory*, or *Unsatisfactory*. At least a three-fourths majority of the committee must rate the research plan as *Satisfactory* or better in order to proceed on to the oral component of General Doctoral Exam. For the purposes of this form, the grades *E*, *S*, and *U* are taken to mean the following:

E = Exceptional:	The research plan is excellent in its conception and writing, and it fulfills the required written component of the Ph.D. qualifying exam. The student is free to proceed with scheduling the oral examination component of the General Doctoral Examination.
S = Satisfactory:	The research plan is of sufficient quality to pass the written requirement of the General Doctoral Exam; the student is free to proceed to the oral component of the exam. An advisory committee member may have critiques or concerns with the research plan that do not preclude its rating as <i>Satisfactory</i> . These can be addressed during the oral exam.
U = Unsatisfactory:	The research plan is of insufficient quality to pass the written requirement of the General

Doctoral Examination. A revised research plan addressing the critiques of the members of the Advisory Committee is required before the student can proceed to the oral exam.

A student who receives a grade of *U* from two or more advisory committee members has two weeks to prepare and submit to the advisory committee a revised research plan which addresses the critiques raised by the committee members. A student who receives a grade of *U* on the revised research plan from two or more committee members, will have two weeks to submit a third and final version of the research plan. If the third version receives a grade of *U* from two or more committee members, the student will be deemed to have failed the written component of the Ph.D. qualifying exam and will not proceed on to the oral component of the exam.

Instructions to the student: Send your research plan to each committee member as an e-mail attachment. Fill out the Written Research Plan Approval Form (Qualtrics form) by checking which draft of the proposal is to being evaluated, and filling in the spaces indicated with your name, and the names of your committee members. In our department, only four committee members (including your advisor) are required. Space is provided for additional committee members if it applies in your particular case. The student is responsible for emailing the committee members and giving them the link to the Written Document Evaluation Form (Qualtrics).

Instructions to the committee member: Two weeks are given for research plan review. Use the Written Document Evaluation form (Qualtrics) to score the document and provide constructive comments to improve the research plan, particularly if a grade of *U* is going to be given. Your evaluation will be automatically sent to the Graduate Program Officer (GPO).

Instructions to the advisor: Upon receipt of committee feedback from the GPO, determine whether or not the student has passed the written component of the General Doctoral Exam (i.e., has an *S* or better from at least $\frac{3}{4}$ of the committee). Compile the feedback of the advisory committee into a summary statement; arrange a meeting with the student to communicate the grade received and summarize the feedback from the committee, and in cases where a *U* has been assigned, advice for submitting an improved research plan.

Written Research Plan, Scoring Rubric

- Scoring will be done using the Written Document Evaluation Form (via Qualtrics; see DCB website)
- Faculty will rank the following items on a scale of 1 5, where 1 is poorest and 5 is best.

Scientific Content

- 1. **Knowledge of subject/background/significance**. To what extent does the writer exhibit knowledge of the field pertaining to and forming the foundation of the research plan? Is the expertise of the writer undermined by misstatements, factual errors, or omission of important details? To what extent does the writer adequately communicate the significance of the research to be undertaken? Scientific significance may be expressed in terms of actual or potential applications to technology *and/or* contributions to understanding fundamental principles or phenomena in nature.
- 2. **<u>Research Plan Coherence</u>**. To what extent does the research plan have clear goals and objectives? Does the introductory material logically lead to the research problem to be addressed? Are the basis and rationale for the experimental approach clear?
- 3. <u>Technical Expertise</u>. To what extent are the methods appropriate to the research questions/problems being addressed? Does the writer exhibit a sufficient grasp of the methodology to be used and what/how it would contribute to the research plan?

Writing Quality

- 4. <u>Clarity of Writing</u>. Is the research plan well organized? Are sections, paragraphs, and sentences clearly written and free of ambiguity? Does the document conform to the page limits prescribed by the Graduate Handbook? To what extent does the writer use proper grammar, punctuation, spelling, and capitalization, etc.?
- 5. **Quality of Figures.** Are the figures and schemes used by the writer legible, clearly described, and appropriately called out in the text? To what extent do the figures/schemes used by the author help to effectively communicate the key points of the research plan?
- 6. <u>*Citations and use of source material.*</u> Does the writer appropriately and correctly cite the sources used to support the research plan? Does the writer misattribute or fail to attribute the published work of others relevant to the research plan?

Summary Score

7. Provide an overall rating of the Written Research Plan.

Comments for improvement:

Summary Score	Grade
Score ≥ 4	Е
$2 \leq \text{Score} < 4$	S
Score < 2	U



GRAD 7@@0/8@@0 Loan Deferment Request

AUBURN UNIVERSITY
GRADUATE SCHOOLGRAD7@@0 and GRAD8@@0 are used to certify certain students
as full-time for financial aid qualification and for loan payback
deferment without requiring registration for a minimum of 9
hours. This form must be returned to the Graduate School for

action. For proper financial aid dispersal, initiation, and deferment, students must submit this completed form to the Graduate School each semester. This must be submitted no later than 12 days prior to the first class day of the following semester.

Instructions: Please fill out this form and print the page and have your Major Professor sign it OR save the form and email it to your Major Professor to obtain an Electronic Signature. Once the form is completed, submit it to the Graduate School via email to <u>gradforms@auburn.edu</u>.

Student Name:	Banner ID:		
Curriculum (Please list your Degree Program):			
Degree Level: Master's EdS PhD			
Term Requesting:			
REQUIREMENTS FOR ELIGIBILITY			
1 Must be a U.S. Citizen er normanent resident			

1. Must be a U.S. Citizen or permanent resident.

- 2. Must be engaged full time in the completion of thesis/dissertation research or in the preparation of the thesis/dissertation.
- _____3. Must be enrolled only in 7910/6, 7920/6, 7950/6, 7980, 7990, 8910, 8920, 8940, 8950, 8980 or 8990 for a minimum of 1 credit hour.
- _____4. Must be making significant progress towards the degree.
 - 5. Must make minimal use of the University facilities and resources.

CERTIFICATION

By signing below, the student and Major Professor certify the eligibility requirements have been met.

Student

Date

Major Professor

Date

Revised August 2021