



Graduate Student Handbook

Master of Science
and
Doctor of Philosophy
Programs in Chemistry

Department of Chemistry and Biochemistry
The University of Texas at Arlington

Academic Year 2021/2022

WELCOME!

The faculty, staff, and students of the Department of Chemistry and Biochemistry at The University of Texas Arlington (UTA) are pleased you have decided to pursue your master's or doctoral degree with us. This handbook is designed to help you get acquainted easily and efficiently with the workings of our department and degree program. The information documented here will let you know what needs to be done, where you need to go, and who can help you with problems that might arise. This handbook, combined with the UTA Student Handbook and the Graduate Catalog, will serve as a source of information you will need to succeed in our graduate program at UTA.

Names you Should Know:

Department Chairman

Dr. Fred MacDonnell
302 Chemistry Research Building (CRB)

The chairman is responsible for all decisions concerning the operations of the department, including the funding of teaching and research assistantships, as well as scholarships.

Graduate Advisor

Dr. Frank Foss
202 Chemistry Research Building (CRB)

Most of the decisions you make concerning your academic program will be made with the assistance of the Graduate Advisor. This includes determining your curriculum, registering, adding and dropping courses, plus completing the necessary paperwork as you pursue your degree. The Graduate Advisor is your first point-of-contact for all of these matters.

Graduate Program Coordinator

Ms. Stephanie Henry
303A Science Hall (SH)

The Graduate Program Coordinator is available to help you with matters of the Graduate School, including progression through the Chemistry Graduate Program, as well as any other University issues you may have. **All Graduate School and departmental forms, listed at the end of this handbook, must be submitted to the Graduate Program Coordinator. Do not submit forms directly to the Graduate School.** Stephanie is also the travel coordinator. She is available to help you with Departmental travel.

Committee on Graduate Studies

Dr. Peter Kroll, Chair
353 Chemistry Physics Building (CPB)

The Committee on Graduate Studies handles the appointment of students' Dissertation/Thesis Committee and its members, student petitions, and periodically reviews the progress of all students. The committee also makes major decisions concerning the requirements of the graduate program found in this document and the Graduate Catalog.

Department Staff:

The staff is available to answer many of your questions and help you in matters concerning the Department of Chemistry and Biochemistry and the University's operations. They are critical in the function of the department and experienced in finding solutions to questions that may not be answered by the Graduate Handbook. The members of the office staff include Debbie Cooke, Natalie Croy, Jill Howard, and Tamika Thompson.

Administrative Assistant II

Ms. Debbie Cooke
130 Chemistry Physics Building (CPB)

The Administrative Assistant in the Department of Chemistry & Biochemistry handle all aspects of your pay including appointments, tuition adjustments, and letters of employment. The AA's also make sure that all paperwork for your hiring file is complete including copies of personal paperwork such as your passport, I-9, and for some, a copy of your comptroller ID number and your new social security number.

Support Specialist I

Ms. Jill Howard
130 Chemistry Physics Building (CPB)

The Support Specialist- in the Department of Chemistry & Biochemistry handles several things that are important to GRAs/GTAs. She will contact you with regards to exam proctoring, which is part of the duties associated with being a GTA, and will assign you to seminar duty. You may, from time to time, need help with sending faxes, making copies or you may have a general question about the department and Jill is the one to ask for assistance. She will also assist you with getting keys and Mav access to rooms in our department.

Accountants

Ms. Nancy Le
223 Chemistry Research Building (CRB)

Ms. Natalie Croy
223 Chemistry Research Building (CRB)

The accountants ensure that all details related to research and teaching accounts are handled properly and in accordance with University Policies. They also aid researchers in procuring materials and equipment.

Stockroom and Purchasing

Ms. Beth Klimek, Assistant Supervisor
110 Chemistry Physics Building (CPB)

The stockroom controls all chemicals and equipment received for teaching and research.

Undergraduate Lab Coordinators

Dr. Bill Cleaver
217 Chemistry Physics Building (CPB)

Dr. Cynthia Griffith
114 Chemistry Physics Building (CPB)

The Undergraduate Lab Coordinators work with faculty and teaching assistants to facilitate the teaching of undergraduate laboratories. They train, supervise, and evaluate teaching assistants, develop lab curriculum, and ensure that teaching labs are well-equipped. They are also responsible for the Prep Room, CPB 108.

I. HOW TO GET STARTED IN THE DEPARTMENT:

A. HR Orientation

i. International Students

1. All international students are required to attend the International Student Orientation. This orientation session is mandatory and you will not be able to attend an advising session, enroll in classes, or get paid unless you attend. All students who will be paid in any form must have a social security number. International students will have to attend the orientation session and then apply for a social security card immediately. New international students: please refer to Appendix 2 at the back of this handbook titled “*Steps for an International Employee on F1 or J1 Status Applying for a Social Security Number*” for directions on how to complete this process. The Office for International Education is located in the Swift Center; 1022 UTA Boulevard, Room 113. The phone number is 817-272-2355. Email: international@uta.edu
2. You are also required to attend a new employee orientation session for all new employees at the Human Resources Office; 1225 W. Mitchell Street, Room 212. The phone number is 817-272-5554. You will need to bring your Visa, Social Security Card (if applicable), and appointment letter. This session is mandatory and you will not be paid until you attend. In order to schedule your time, you will need to allocate about two hours for this orientation.
3. All international students, whose native language is not English and who are the recipients of a Graduate Teaching Assistantship, are required by the state of Texas to meet English proficiency requirements within their first academic semester. This is mandatory. For more information please see First Year Program Requirements beginning on page 10 of this document.

ii. U.S. Students

1. Students who are US citizens, Permanent Residents, or Resident Aliens are also required to attend an orientation session for all new employees at the Human Resources Office; 1225 W. Mitchell Street, Room 212. The phone number is 817-272-5554. You will need to bring both your Social Security Card and either a Texas Driver’s License or some other form of valid identification to the session along with your appointment letter. This session is mandatory and you will not be paid unless you attend. In order to schedule

your time, you will need to allocate about two hours for this orientation.

iii. Payroll and Human Resources

1. The Human Resources Office provides the faculty, staff, and students with assistance in the areas of policies, procedures, benefits, compensation, and employment training and development. They provide new employee orientation for new employees, located at 1225 W. Mitchell Street in the Wetsel Building Room 212. The Payroll Services Department is also located in the Wetsel Building in Room 207.

B. MavExpress Card

- i. During registration you will be directed to the MavExpress Office, which is located at the north end of the University Center's main level, where your picture will be taken and a University ID card will be issued. This card will allow you access to the chemistry buildings as well as to various campus events, the library, recreational sports facilities and the Health Center. In addition, it serves as a source of identification to verify that you are a UTA student, and it may allow you to receive discounts from several vendors around the campus.

C. Building Keys

- i. Jill Howard in CPB, Room 130, will arrange for keys and access to the appropriate buildings. All keys must be picked up from Key Control Services located in the Wetsel Building, suite 100.

D. Desks

- i. All new students who are GTA's or GRA's will initially be given desks and will move into research space when they choose an advisor at the end of their first semester.

E. Parking Pass

- i. If you plan to park at UTA, then you will need to purchase a parking pass from the Parking Office, 710 S. Davis Dr., located in the Office and Classroom Building. Busses, shuttles, and rideshare services operate in and around UTA, and offer an alternative to parking on campus. Check UTA Parking and Transportation, as well as the City of Arlington Transportation for current options.

F. Mailboxes

- i. Student mailboxes, with a GTA or GRA position, are located in Room 130, CPB. You must check your box daily for messages, particularly in your first few weeks here, since many things are

happening and most of them are very important. The room is locked after hours, so you may feel fairly secure about mail in these boxes.

G. Email Accounts

- i. Your NetID and email account are automatically created at the beginning of your first academic semester.
 1. Your NetID is a campus computer account. This account is your key to accessing many computing resources on campus and off, such as UTA domain login and network disk space (J: drive, e-mail, Internet connections, and web page space).
 - a. To activate NetID, manage your NetID identification questions, review your pin number, and/or view information about your accounts, etc. by going to following link for information:
<https://webapps.uta.edu/oit/selfservice/>
 - b. If you run into difficulty then go to the Central Library's OIT (Office of Information Technology) Help Desk
 2. Your email account is where you receive official communications from the department, the faculty, and from other students.
 - a. To find out about the student MavMail system and to learn how to set up your new email account please go to the following link:
<https://www.uta.edu/oit/cs/email/mavmail.php>
 - b. Please note that it is a requirement for all graduate students employed on an assistantship with the Chemistry Department to check their UTA email at least once a day. There are times when we will need your assistance (proctoring, grading, etc) and will notify you via email. Claiming that you did not check your email is not an acceptable excuse for missing such assignments! All official communication between the Chemistry Department and the graduate students occurs via e-mail. Most of the time graduate students will also be issued a hard copy of the communication which is placed in their departmental mailbox.

II. UNIVERSITY FACILITIES

A campus map can be found in the University Graduate Catalog. Some of the facilities with which you will have the most contact are listed below. An interactive map can be found here: www.uta.edu/maps/

A. Office of Research and Graduate Studies

- i. Can answer questions and supply the necessary forms that are not available in the Department of Chemistry and Biochemistry office. The Office of Graduate Studies is located in Room 348 Davis Hall, 817-272-5164.

B. Office of Records and Registration

- i. Check with this office for tuition payment and due dates. The Office of Records and Registration (Registrar's Office) is located in Room 129 Davis Hall, 817-272-3372.

C. Libraries

- i. The University has several libraries, including the Central Library, the Science and Engineering Library (SEL) and the Architecture and Fine Arts Library. A full description of the library system is given in the Graduate Catalog. Most of the holdings of interest to the Department of Chemistry and Biochemistry are located in the Science and Engineering Library, located in the basement of Nedderman Hall, while some of the older holdings are archived in the Central Library. Most journals can now be accessed electronically from computers either on or off-campus. To use this electronic access, a UTA computer account is necessary.

D. Health Center

- i. The UT Arlington Health Services is available to meet some of your medical needs. It is located directly east of the Chemistry Physics Building in the Heath Center Building. The Graduate Catalog contains a full description of the services offered by the health center. The Health Services website also contains the above information along with their operating hours and other contact information, and it can be found at:
<http://www.uta.edu/healthservices/>

E. University Center

- i. The University Center has numerous facilities and offices of interest to all students. University Center houses 13 private dining/meeting rooms, several lounges, two ballrooms, two huge food service areas, a Starbucks coffee shop, a post office, a general store, an art gallery, and much more. The center is also home for 160 campus student

organizations, Student Congress, and the Student Activities Board. The Housing Office and MavExpress Office are also located in the University Center.

F. The Commons

- i. West Campus has a new center for student life in The Commons, which opened this fall 2018. Dining options at The Commons include the all-you-care-to-eat Maverick Café, Starbucks, and bistros offering Mediterranean and Italian cuisine. The Commons also offers group meeting rooms, study and lounge areas, and more.

III. REQUIREMENTS OF THE PROGRAM

As in any doctoral program, you will be required to accomplish a number of tasks before being awarded your degree. In this section, the entire process will be outlined step by step. Please read this carefully and refer to it often. **It is your responsibility to know and follow the deadlines stipulated here.**

A. The First Year

i. International Students

1. International Student Orientation must be attended upon arrival at UT Arlington before you may meet with the Graduate Advisor. Once this is complete you may go to the next step.

ii. All New Graduate Students

1. A Graduate Advisor meeting will be scheduled for the initial advising session before you may register for classes. You will be notified (by email) before the start of each semester of the advising schedule. Make sure you check your UTA email address regularly.
2. Note: Registration requires seeing the Graduate Advisor and filling out a Registration Advising Form. Your initial advising session will consist of a meeting with the Graduate Advisor, chairman of the department, chairman of the Committee on Graduate Studies, and other faculty representatives. The advising form complements the degree timeline (see Appendix) which will give you a good idea of the expected progression of events. The deadlines for the completion of certain important requirements, such as the proposal defense, will be set at the advising session and are discussed in detail later in this handbook. These deadlines cannot be changed except by petition directly to the Committee on Graduate Studies Chairman. If you have graduate course work from another University, the Graduate Advisor, with the consent of the chairman of the Committee on Graduate Studies, is empowered to waive course requirements if the student can clearly demonstrate previous course work which is equivalent to that offered at UTA. This is handled on a case-by-case basis at the time of your initial advisement.

iii. English Proficiency

1. If you are an International student whose native language is not English and who is a recipient of financial support in the form of a Graduate Teaching Assistantship (GTA) and/or a STEM Fellowship, it is mandatory that you meet English

proficiency requirements within the student's first academic semester. For details on the requirement and the deadlines please visit the UTA graduate catalog 2019-2020 (<https://www.uta.edu/gradstudies/faculty/grad-catalog.php>)

2. The consequence of not meeting this deadline is that No STEM Fellowship will be considered after this deadline.
3. To accomplish this, students must satisfy one of the following:
 - a. Achieve a score of at least 23 on the TOEFL IBT speaking subtest within your first semester.
 - b. Achieve a score of at least 7 on the speaking section of the IELTS within your first semester.
 - c. Take and pass the UTA English Language Institute's Developmental English Course. Contact the English Language Institute at 817.272.2730 for details, including the current class schedule and charges. No department funding will be used to cover the expense of this course.
4. Students who have not satisfied this requirement before arriving on campus must take either the TOEFL IBT, or the IELTS at a local testing center and achieve the required minimum score. Current information about TOEFL IBT test dates, locations, and registration procedures are published by ETS at <http://www.ets.org/> Current information about IELTS test dates, locations, and registration procedures are published by IELTS at <http://www.ielts.org/> Official test score reports for the Test of English as a Foreign Language (TOEFL) are issued by the Educational Testing Service (ETS) and sent by ETS directly to the Graduate School. Official test scores for the International English Language Testing System (IELTS) are reported on an IELTS issued Test Report Form (TRF) and sent directly to the Graduate School from IELTS.
5. Students who do not achieve scores on the TOEFL IBT, or IELTS high enough to satisfy the English proficiency requirements for graduate teaching assistants must enroll in the Developmental English Program and be certified for English proficiency. This 10-week program offered by the UT Arlington English Language Institute emphasizes accent reduction and oral presentation skills needed by teaching assistants. Contact the English Language Institute at 817.272.2730 or visit their Web site at <http://iep.uta.edu> for details, including current class schedule and charges.

Students may not be eligible for STEM funding if English proficiency requirements are not met.

iv. Selecting the Thesis Advisor for M.S. Students (with Thesis)

1. It is important that the student must focus primarily on their course work in the first and second semesters. Towards the end of the second long semester students are advised to consult different faculty members for selecting their faculty advisor. At the beginning of the third long semester, students should finalize a faculty advisor and start working in the laboratory for developing the M.S. thesis project. By the end of the semester (3rd long semester), student and faculty advisor should meet and develop a formal M.S.-thesis plan (which is feasible, realistic, and can be completed within the 4th long semester).

v. Research Advisor

1. All new graduate students must select a research advisor by the end of their first semester. Students need to have a discussion with at least three faculty members, before they make a group selection. The faculty will have to sign off on a signing sheet that the student needs to submit together with their selection/choice to graduate studies committee chair, Dr. Kroll, by end of the first semester. The faculty will review the choices and then make the decision based on your top three choices.
2. Note: You are *strongly* encouraged to talk to a large number of faculty members about potential research projects. This is perhaps the most important decision you will make during your stay at UTA, and it should be made carefully. To help you with this decision, each fall the department will offer CHEM 6011 and CHEM 6012, a series of faculty seminars and research topics. Attendance at these seminars, as well as the regular Friday afternoon departmental seminars, is mandatory. You must begin research no later than the start of your second semester here. This is usually the spring semester and may only mean reading the relevant literature and planning your upcoming research activities. However, you must select a research advisor by the end of the first semester of your first year at UTA.

vi. Departmental Seminars

1. Attendance at regular Friday afternoon departmental seminars as well as the series of faculty seminars is

mandatory. You are assigned seminar duty when taking CHEM 5011, which all graduate students are required to take twice during their studies in the graduate program. These duties will be explained to you as they arise.

vii. Academic Work

1. Your first year will be devoted primarily to course work.
 - a. Students with graduate teaching or research assistantships must be enrolled in a minimum of 9 hours of coursework in both long semesters.
 - b. Students with graduate teaching must be enrolled in a minimum of 6 hours of coursework in the summer sessions.
2. Ph.D. students are required to take three seminar courses and three chemistry courses in their first semester.
 - a. Exceptions *may* be given to students who are intending to join the Biochemistry division.
3. The details of the course offerings are listed in the Graduate Catalog, and the requirements that pertain to you are those listed in the catalog that is current at the time you enter the University. It is important to save this catalog. Unless you have course deficiencies to be made up, you will take mainly "core" courses in the first year.
4. The Office of Research and Graduate Studies requires that you maintain a 3.0 grade point average (GPA) in all course work taken as a graduate student and, in addition, the Department of Chemistry and Biochemistry requires a 3.0 GPA, with not more than one grade of "C" in the core courses. If your GPA falls below 3.0 at any time, the Office of Research and Graduate Studies will automatically put you on academic probation. A student on academic probation is not in good standing and, therefore, is not eligible to hold an assistantship. If the department is supporting you as a teaching assistant, you will lose your support while on probation. You then have one long semester to raise your GPA to 3.0 and you will not receive a GTA or GRA during this semester. The Committee on Graduate Studies will meet at the end of each semester to review the progress of all graduate students on academic probation. Under very special circumstances, the Graduate Studies Committee may petition the Office of Graduate Studies to allow a student to continue on academic probation for one extra-long semester; however, you should not count on this. Keeping your GPA above 3.0 is extremely important and you should keep the

Graduate Advisor aware of any difficulties you are having in courses at the first sign of trouble. The Advisor is there to help you and can provide more help when notified earlier in the semester.

viii. Diagnostic Evaluation

1. All students will complete a series of Diagnostic Exams (ACS subject exams) upon arrival at UTA. These exams are used to evaluate your foundational knowledge in Chemistry and Biochemistry. This information, combined with your desired area of study, will inform you and the Graduate Advisor before courses are selected for your first year of study. Students must successfully pass three exams before the completion of one calendar year. Multiple exam dates will be administered throughout the year to give students ample opportunity to complete this requirement.

B. The Second Year

- i. Formal Admission to the Ph.D. Program (M.S. students only)
 1. At the end of your third long semester (typically the fall semester) or very early in the fourth long semester (typically the spring semester), you must file **FORM_A “Request for Change of Graduate Program or Degree Level”** if you want to change from the Master’s program to the Ph.D. program. Make sure to bring the original of **FORM_A** to the Graduate Program Coordinator in Science Hall 303A so that she may make a copy of this form for your file. Your records will be evaluated by the Graduate Studies Committee. It is expected that you will complete all Master level requirements before being admitted to the Ph.D. program. (This does not apply to B.S. to Ph.D. bound or Ph.D. students.)
- ii. Thesis Committee for M.S.-Thesis Students
 1. Your progress in the graduate program will be closely monitored by your faculty thesis committee. To form this committee, you must submit a memo (email is acceptable) to the chairman of the Committee on Graduate Studies (Prof. Kroll) requesting a thesis committee. This task should be completed at the beginning of their final semester (4th semester) (January 31 for the fall enrollment and September 30 for spring enrollment). The following information needs to be included in this memo:

- a. The topic of your research (be as specific as possible as your thesis committee members are chosen with respect to their knowledge of your intended field of work)
 - b. The name of your research advisor
 - c. Suggestions of two faculty members who would be appropriate for your committee based on their expertise.
 2. The chairman of the Committee on Graduate Studies will then assign you a committee of at least three faculty and notify you (probably by email) of your committee. Your committee members may not be altered without appeal to the Graduate Studies Chairman.
- iii. Graduation Information for Master's Students
- Those students seeking a Master's Thesis Degree must enroll in CHEM 5698 during their final semester.
1. At the beginning of the fourth long semester (by January 31 for fall enrollment and August 31 for the spring enrollment), the detailed plan should be submitted to M.S. thesis committee members for their approval. A copy of the approval of plan should be provided to Graduate Studies Committee chair (Prof. Kroll) and the Graduate Program Coordinator. Once it is approved the student should continue and complete the proposed research in the 4th long semester. Finally write the thesis and defend the final M.S. (thesis) examination in front the M.S.-thesis committee.
 2. It is the student's responsibility to be aware of Graduate School deadlines for submitting all forms, defending their Thesis, submitting the Thesis for checks, etc., and to make their committee members aware of these deadlines. These are found at: <http://catalog.uta.edu/science/chemistry/>
 3. Prior to or during your last semester you must apply to graduate through the Graduate School's website. At that time, you must fill out **FORM_J "Intention to Graduate & Thesis or Dissertation Title"** and give it to the Graduate Program Coordinator. This informs the department and the Graduate Program Coordinator of your intention to graduate, the semester in which you intend to do so, and the title of your Thesis. It is the student's responsibility to pay attention to deadlines.
 4. For those students who seek to graduate with a Master's Thesis degree, a copy of **FORM_K "Request for Final Master's Exam"** must be submitted with signatures to the

Graduate Program Coordinator at least a week before the Graduate School deadline for that semester. You also must complete the exam, and submit a copy of **FORM_L “Final Master’s Exam Report”** to the Graduate Program Coordinator before the deadline. It is your responsibility to get the originals of these documents to the Graduate School by the deadlines.

5. Toward the end of your final semester you must fill out **FORM_O “Where Plan to Work after Graduation”** form and turn it in to the Graduate Program Coordinator. This form allows the Department to track what types of careers its graduates go on to do.
 6. NOTE: Master’s Non-Thesis students are not required to fill out forms K and L or take the Final Master’s Exam. They only must be enrolled during the final semester.
- iv. Master’s Final Examination/Thesis (M.S. Thesis Students only)
Students in the Master’s Non-Thesis program are not required to take the Master’s Final Examination.
1. In order to graduate, you must take the Master’s Final Exam by the end of the 4th long semester in the program. The end of the semester refers to the last day of classes, and the fall and spring terms are considered long semesters. Because many thesis committees meet during the spring semester, you are strongly encouraged to schedule your meeting early in the semester.
 2. There are a number of forms which must be filled out and filed at the appropriate times during this process. These forms are labeled **FORM_A through FORM_O** and are available by email request to the Graduate Program Coordinator or from the Department website in electronic format. Hardcopies are also provided at the end of this handbook for your review. All Graduate School forms should be typed. Additionally, a **CHECKLIST** is provided at the end of this section to help with this entire process.
- v. Thesis Committee (Ph.D. students only)
1. Your progress in the graduate program will be closely monitored by your faculty thesis committee. To form this committee, you must submit a memo (email is acceptable) to the chairman of the Committee on Graduate Studies (Prof. Kroll) requesting a thesis committee. This task should be completed at the beginning of the 3rd semester (by September 15 for the fall enrollment and February 15 for

spring enrollment) after enrollment in the program. The following information needs to be included in this memo:

- a. The topic of your research (be as specific as possible as your thesis committee members are chosen with respect to their knowledge of your intended field of work.)
 - b. The name of your research advisor
 - c. Suggestions of three faculty members who would be appropriate for your committee based on their expertise.
2. The chairman of the Committee on Graduate Studies will then assign you a committee of at least 4 faculty and notify you (probably by email) of your committee and who the chair of your committee is. All 4 thesis committee members will attend your comprehensive examination as well the final thesis defense examination. However, 3 of the committee members will attend your annual research update examinations and 4th members (as assigned by the GSC chair) are not required to attend the research update examinations. One of the thesis committee members must be outside the core discipline. Please note that the chair of your thesis committee cannot be your research advisor. Your committee members may not be altered without appeal to the Graduate Studies Chairman.
- vi. Diagnostic Evaluation
Students in the Master's Thesis and Non-Thesis program are not required to take the Diagnostic Evaluation but may do so.
1. The Diagnostic Evaluation certifies you as a potential doctoral level scientist. After having applied to the Graduate Studies Chairman, a committee will be selected and then complete your Diagnostic Evaluation, which includes:
 - a. Review of your 1st year GPA, which must be 3.0 or higher.
 - b. Confirmation from the Graduate Program Coordinator that you have passed three required examinations.
 - c. A discussion of your performance in the core courses, teaching assignments, and all other relevant issues.
Fill out **FORM_B "Diagnostic Evaluation Report"** properly and have your committee members and the Graduate Advisor sign it where appropriate. Then turn the completed **FORM_B** in to the Graduate Program Coordinator in Science Hall 303A.

vii. Comprehensive Examination/Proposal Defense

1. In order to be formally admitted to the Ph.D. program, you must take the Comprehensive Exam/Proposal Defense by the end of the 4th long semester in the program. The end of the semester refers to the last day of classes, and the fall and spring terms are considered long semesters. Because many thesis committees meet during the spring semester, you are strongly encouraged to schedule your meeting early in the semester.
2. There are a number of forms which must be filled out and filed at the appropriate times during this process. These forms are labeled **FORM_A through FORM_F** and are available by email request to the Graduate Program Coordinator or from the Department website in electronic format. Hardcopies are also provided at the end of this handbook for your review. All Graduate School forms should be typed. Additionally, a **CHECKLIST** is provided at the end of this section to help with this entire process.
3. The Comprehensive Exam/Proposal Defense consists of a written document (details below), an oral presentation, and an oral exam. Prior to the exam, you will work with the Graduate Studies Chairman to obtain a thesis committee of at least four faculty members (appointed by the chairman of the Graduate Studies Committee). This committee will evaluate both the written report and the oral components of the examination. While your research advisor will be a member of the committee, he/she does not actively participate in this exam and cannot be the chairman of your thesis committee.
 - a. The purpose of the Comprehensive Exam is to provide evidence that you have the potential to pursue and successfully complete the degree program by writing and orally defending a research proposal that will become the basis for your Ph.D. Dissertation.
4. You must meet with an administrative assistant in the Chemistry Office no later than the middle of October in the fall semester or the middle of March in the spring semester to check availability of conference rooms, and to review available time slots for scheduling your Comprehensive Exam/Proposal Defense for the following semester. You should have the Comprehensive Exam/Proposal Defense room reservation (exam date) finalized with your thesis committee no later than the end of October (10/31) in the fall

semester and the end of March (3/31) in the spring semester. It is the student's responsibility to coordinate and schedule the exam date to fit the schedule of all committee members. Please begin this discussion with your committee as soon as possible.

5. Once you and your committee have finalized an exam date, fill out **FORM_C "Request for Comprehensive Exam"**, and obtain all your committee members' signatures along with the signature of the Graduate Advisor, and then turn the completed form in to the Graduate Program Coordinator in Science Hall 303A. **FORM_C** must be completed and turned in at least 15 days prior to the exam date.
6. You will fill out **FORM_D "Summary Sheet for Comprehensive Exam (Proposal Defense)"** and bring it with you to the exam.
7. By following these timeframes you: will meet official deadlines, have the opportunity to avoid scheduling conflicts with your committee members and/or other students, and will have ample time to complete your Comprehensive Exam/Proposal Defense before the end of the semester. More details about this process are provided in the **CHECKLIST** below.
8. Note: You are strongly encouraged to defend your Comprehensive Exam/Proposal Defense as early as possible in the semester. The longer you wait, the more difficult it will be to not only find an open conference room with a suitable time frame, but also to find a time frame acceptable for all the committee members to meet. As such you are welcome to meet with the Graduate Program Coordinator prior to the suggested times if you would prefer to complete this process early.

viii. Written Proposal for Comprehensive Exam

1. You must write a ten-page proposal directly related to your area of research and provide a copy of it to each of your committee members no later than one week prior to the exam.
 - a. This proposal has strict length and format limitations. It should be typed on 8 1/2 x 11" paper. All text must be in 12-point font, double-spaced throughout, and the document must have one-inch margins on all sides. Tables, figures, and references must be included in the 10-page limit. The total length of the proposal cannot exceed 10 pages.

- b. However, it is worth noting that the best proposals are not necessarily the longest. Many excellent proposals in the past have been only 6-7 pages long.
 - c. Preliminary research results should be included, sparingly, to introduce and support proposed work.
 - d. The proposal should demonstrate technical competence in the field chosen.
 - e. The current "ACS Style Guide" published by the American Chemical Society should serve as a style guide for the written proposal.
2. Your proposal should include:
- a. Background: What previous research has been done related to your proposal?
 - b. Motivation: Why is the area important? What new information will your work yield?
 - c. Research plan: How will you carry out your proposed research? A fair amount of detail is required here, including what you will do if your "best idea" does not work and how you will analyze your results. The majority of your document should be about future work.
 - d. Conclusion: What will be learned/advanced if your proposal is successful? How will your proposal address the motivation of your project?
 - e. Appendix (if appropriate): Experimental details in a style appropriate for publication – Please ask your advisor and committee chair if additional materials are requested.
3. ***NOTE: You must provide your committee members with a copy of this report and post flyers announcing your presentation no later than two weeks before the exam date! If you are late in turning in this report, any faculty member on your committee can require you to reschedule your exam date. You are still required to have it completed before the last day of classes, even if it is rescheduled.***
- ix. Oral Presentation for the Comprehensive Exam/Proposal Defense
- 1. The oral presentation portion of your exam should consist of a 20-30 minute presentation on the topics and results presented in your written report. The presentation should be done as professionally as possible, preferably using presentation program with high quality slides. The oral exam will consist of questions asked during and after this presentation.

2. At the oral exam, you will be evaluated in four basic areas:
 - a. Technical content of the written proposal.
 - b. Quality of the written proposal (logical presentation, grammar, style, etc.)
 - c. Oral presentation, including ability to answer questions related to the proposed research
 - d. A special emphasis will be placed on your general technical knowledge of chemistry.
3. The oral examination will be public, except for a final question-and-answer session that will involve only the student and the committee.
4. The results of the exam are reported to the Office of Research and Graduate Studies via **FORM_F “Comprehensive Examination Report”** which you are required to fill out in advance and to bring to the exam. Your committee will complete this form at the end of the exam. File this form with the Graduate Program Coordinator in Science Hall 303A as soon as possible after your exam, no matter what the outcome of the proposal defense.
5. Shortly after the exam (2-3 days), the chairperson of your thesis committee will provide you with a brief memo detailing the results of your exam and listing any suggestions or remedial work that must be completed.
6. If you do not pass this exam, you may be allowed one, and only one opportunity to retake it. This second exam must be within three months of the first one, except under special circumstances as defined by your committee; however, your committee may require you to take it earlier.
7. Failure to take the Comprehensive Exam/Proposal Defense in the designated semester results in an automatic failure unless you are specifically granted an exception by the Graduate Studies Chair. Additionally, you will not be eligible for a pay raise the following academic year if you have not completed this exam on time.

Diagnostic Evaluation & Comprehensive Exam Checklist:

- Request and obtain faculty thesis committee from Graduate Studies Chair (Prof. Kroll). The committee will consist of at least 4 faculty, one of which must be your advisor. Please send Prof. Kroll an email (pkroll@uta.edu) with your request for a thesis committee. Be sure to indicate your advisor's name and your intended project (so Prof. Kroll can assign appropriate faculty). If your project is in collaboration with another faculty member, please indicate. You may suggest the two additional faculty members but are not guaranteed that these will be on your committee. When, you receive your committee information, be sure to note who the chair of your committee is.
- Schedule a date with your committee members to take the Comprehensive Exam. This is often a tedious and difficult task as coordinating the schedules of the faculty members is tricky. Additionally, the faculty are all on numerous student committees; therefore, dates fill up fast. You need to schedule at least a 2-hour time slot for the exam and reserve a room for that time. Room reservations can be made in the chemistry front office.
- Fifteen days before the exam, fill out and have your committee members and the Graduate Advisor, sign two forms: **FORM_B "Diagnostic Evaluation Report"** and **FORM_C "Request for Comprehensive Examination."** These forms should be typed. Have your committee members sign them where appropriate and bring the completed forms B and C to the Graduate Program Coordinator in Science Hall 303A.
- You need to prepare a written proposal (as described earlier in this handbook) and to distribute copies of this paper to your committee members two weeks before your exam date. Failure to turn this in on time can result in the exam being cancelled.
- At least 5 business days before your exam, post public notices around the department announcing the title of your presentation, your name, and the time, place and date of your examination. Send your committee members an email reminding them of the exam and be sure to notify your committee chair that they are the CHAIR of your committee (this is because they have special responsibilities for your exam but often forget which students they are chairs for!)
- Fill out all of **FORM_D "Summary Sheet for Comprehensive Exam (Proposal Defense) "**. Fill out the top of **FORM_E "Comprehensive**

Exam Rubric" and as much of **FORM_F "Comprehensive Exam Report"** as you can. Bring all of these forms (D, E, & F) with you to the exam. These forms should be typed.

- Prepare and practice your talk. If you review **FORM_E "Comprehensive Exam Rubric,"** you will see some of the specific areas that you will be evaluated on. For your information, the following instructions are given to the faculty committee:

"The students committee consists of four or more faculty including their advisor. Someone other than the advisor is assigned as the chair of the committee and is responsible for running the oral exam. The questions should explore the student's general chemistry knowledge and understanding with an emphasis on the chemistry most relevant to their project (which is presented in the talk and in the written report). While positive results related to research undertaken are desirable, they are not the primary basis for passing/failing the exam. Emphasis should be on their preparation, drive, and potential to complete a Ph.D. and the general ability to answer questions asked. Finally, the student's advisor is asked to simply observe the exam and not to answer the questions."

- After your exam, your committee will give you some immediate feedback regarding your performance and any additional work that may be required (e.g. rewrite paper). After your committee and Dr. Foss, the Graduate Advisor, sign **FORM_F "Comprehensive Exam Report"**, give it to the Graduate Program Coordinator in Science Hall 303A for processing.
- One week after your exam you should receive a memo from your committee chair detailing the committee's evaluation and outlining your future requirements. At that same time you should also receive a copy of the completed **FORM_D "Summary Sheet for Comprehensive Exam (Proposal Defense),** and **FORM_E "Comprehensive Exam Rubric."** Both of these documents will detail areas where you did well or poorly and thus give you direction on how to improve your performance in the future. You are always welcome and free to discuss your progress with any and all of your committee members. One week after the exam a copy of the memo, **FORM_D "Summary Sheet for Comprehensive Exam (Proposal Defense),** and **FORM_E "Comprehensive Exam Rubric"** should be provided to the Graduate Program Coordinator.

SUGGESTION: Attend other student's exams! That will give you a feeling for the types of questions and atmosphere of the exam. You will see that the exam is not meant to be an unpleasant experience and the more you prepare for it the better you will do.

C. The Third and Subsequent Years

i. Research and Research Updates

1. By your third year, you should be well along in your research. Each year after you pass your comprehensive exam (from the third year on) you will be required to provide a one-page abstract of research results to your thesis committee and to give a 20-minute oral presentation (Research Update). The only exception to this is
 - a. When you are on internship (in which case the update is delayed one semester)
 - b. The semester you graduate. This research update will be open to all members of the department and will be attended by the student's thesis committee.
2. The research update must be scheduled with the thesis committee members at least one month in advance. If your update is due in the fall semester it must be given by November 15th. If your update is due in the spring semester it must be given by March 15.

ii. Guidelines and Requirements for Research Updates

1. One week prior to the Research submit the one-page abstract to your committee members.
2. Fill out **FORM_G “Annual Summary Sheet for Research Updates”** and **FORM_H “Research Update Form.”** Provide the Graduate Program Coordinator these one week prior to the update. Take copies of these two forms, one for each committee member, to your update. Your committee will complete **FORM_H** at the end of the exam. The student is responsible for requesting that the committee chair provide the Graduate Program Coordinator completed copies of these two forms within one week of the exam along with a Research Update Memo.
3. Present a brief (5-10 minute) summary of your original proposal and the research you had completed one year ago.
4. Present a 10-15 minute summary of the research you have accomplished since your last proposal or proposal update. In this summary, include discussions of
 - a. Progress on work you previously proposed (what went right, what went wrong).
 - b. Any changes of direction.

5. Present a 5-10 minute discussion of what you intend to accomplish in the next year.
6. Please note that if you take the maximum time in steps 1-3 you would give a 35-minute talk. It should not be any longer than that.
7. Also, note that this is intended to be a progress report: the main body of the talk should be what you have accomplished in the last year, the secondary emphasis should be what you intend to accomplish in the next year.
8. As with your comprehensive exam/proposal defense, have the chairperson of your committee write a brief memo detailing any suggestions or remedial work that must be completed. Submit a copy of this memo to the Graduate Program Coordinator to be placed in your academic file.

iii. Internship

1. The internship may be taken any time after formal admission to the doctoral program, subject to the availability of suitable positions and the desires of the student and the research advisor. However, it is normally done in the third year, or later. Note that the timing of the internship does not affect the timing of the proposal defense. You must defend your proposal on or before the fourth semester as a graduate student, even if you go on internship earlier.
2. The successful completion of an industrial internship is a degree requirement for the Ph.D. in Chemistry. The purpose of the internship is to familiarize you with how research is done in a non-academic setting and thereby better prepare you for a career in industry. Financial support during the internship will be provided to the department by the company, but administered through the department. Normally the internship will involve research in the general area of your doctoral research, but the research accomplished during the internship will not be included in your dissertation.
3. Please fill out **FORM_I “Internship Form”** and turn in to the Graduate Program Coordinator in Science Hall 303A, 2-4 weeks before departure to the internship. The industrial internship will normally start at the beginning of an academic semester and last the equivalent of one academic semester. This means between 3 and 4 months. You will enroll in either CHEM 6904 or CHEM 6104, depending on whether or not the internship is paid, throughout the

duration of the industrial internship. Please check with the Graduate Advisor concerning this registration.

- a. Note: Internship must be taken before the final semester of a student's program in order that all the Ph.D. program course requirements are met. This is due to the fact that the internship course above and the final dissertation defense course CHEM 7399 (see section below) are both required to graduate.
 4. Talk with your research advisor about internship opportunities, and then with the Graduate Advisor and Graduate Studies Chair to see about any contacts available through the department. Many students have found opportunities themselves by researching different companies via the internet. If you discover such an opportunity, please clear it with your advisor and the Graduate Studies Chair before accepting such an internship.
 5. International students must file all appropriate forms for participating in internships before attending an internship; Curricular Practical Training (CPT). You will find these documents and all mandatory protocols on the Office of International Education's website.
- iv. Graduation Information for Doctoral Students
1. Prior to or during your last semester you must apply to graduate through the Graduate School's website. At that time you must fill out **FORM_J "Intention to Graduate & Thesis or Dissertation Title"** and give it to the Graduate Program Coordinator. This informs the department and the Graduate Program Coordinator of your intention to graduate, the semester in which you intend to do so, and the title of your Thesis/Dissertation.
 2. It is the student's responsibility to be aware of Graduate School deadlines for submitting all forms, defending their Dissertation, submitting the Dissertation for checks, etc., and to make their committee members aware of these deadlines. These are found at:
<http://catalog.uta.edu/science/chemistry/>
 3. Toward the end of your final semester you must fill out **FORM_O "Where Plan to Work after Graduation"** form and turn it in to the Graduate Program Coordinator. This form allows the Department to track what types of careers its graduates go on to do.
- v. Dissertation Defense

1. The final requirement for the Ph.D. degree is the submission and oral defense of a dissertation that describes the results of your original research. A number of resources are available through the Office of Graduate Studies to help you prepare and complete the writing of your dissertation, including example dissertations from various fields. Be sure to follow specific guidelines for reporting data within your dissertation, as set forth by your research advisor and/or academic division within the Department.
2. Your faculty comprehensive exam/proposal defense committee will serve as your dissertation committee except that the chair of this committee is now your research advisor. If the need arises to replace a member of this committee, then a new committee member will be selected and approved by the Committee on Graduate Studies in consultation with your research advisor. However, changes in the committee makeup at this stage will only be approved under unusual circumstances.
3. In accordance with University regulations, the oral defense must be scheduled at least two weeks in advance, via **FORM_M "Request for Dissertation Defense"**. Additionally, a copy of the dissertation must be given to each member of the committee two full weeks in advance of the exam. In addition to your advisor, someone whose native language is English should proof your document. This copy should be in a form so that, except for the final printing and binding, it could be turned in as the final version if there are no corrections to be made after the defense. It should not be left for the committee to make major corrections and revisions in the spelling, syntax, organization, or content of the dissertation! Submission of a dissertation that is clearly in need of significant rewriting will result in automatic failure at the first oral defense.
4. At the oral defense, you will give a brief presentation of your dissertation research and answer questions from the committee and the audience. It is a public exam, except for a final question-and-answer session that will involve only the student and the committee. Following the oral defense, **FORM_N "Dissertation Defense Report"**, which provides the result of the oral defense, must be submitted to the Graduate Program Coordinator. You are responsible to see that any conditions placed on passing, such as corrections in the dissertation, are completed to the satisfaction of the committee. Failure of the defense will

result in either the scheduling of a second defense within three months or dismissal from the program. Failure at a second defense will result in dismissal from the program.

5. While writing the Ph.D. dissertation, you should be enrolled in CHEM 6399, 6699, or 6999. In the semester in which you graduate you should be enrolled in 7399, as only this course can be graded with a P (passing) when you pass the oral defense.
6. In the semester that you plan to graduate, there are several important deadlines that must be met. These deadlines may be found in the Current Graduate Catalog. To find these deadlines go to the UTA webpage and type in "University and Graduate School Calendar 2019-2020" in the search bar. There is also a checklist of things to do/fees to pay in order to graduate, which is found in the catalog under "Graduation Procedures". In addition, the Office of Graduate Studies offers a seminar each semester on "How to Graduate".

APPENDICIES

1. General Degree Requirement Timeline
2. Steps for an International Employee on F1 or J1 Status Applying for a Social Security Number
3. Steps for Conference Registration and Purchase Orders
4. **FORM_A** Request for Change for Graduate Program or Degree Level
5. **FORM_B** Diagnostic Evaluation Report
6. **FORM_C** Request for the Comprehensive Examination (Ph.D.)
7. **FORM_D** Summary Sheet for Comprehensive Exam (Proposal Defense)
8. **FORM_E** Comprehensive Exam Rubric
9. **FORM_F** Comprehensive Examination Report
10. **FORM_G** Annual Summary Sheet For Research Updates
11. **FORM_H** Research Update Form
12. **FORM_I** Internship Form
13. **FORM_J** Intention to Graduate & Thesis or Dissertation Title
14. **FORM_K** Request for Final Master's Exam
15. **FORM_L** Final Master's Exam Report
16. **FORM_M** Request for Dissertation Defense
17. **FORM_N** Dissertation Defense Report
18. **FORM_O** Where Plan to Work After Graduation
19. Graduation Checklist for Thesis/Dissertation
20. Graduation Checklist for Non-Thesis

Important Notices:

- All of these forms are available in electronic format either by request from the Graduate Program Coordinator or through the Department website.
<https://www.uta.edu/chemistry/academics/Graduate-Handbook-and-Forms.php>
- All of the forms, except for Forms E & H, should be filled out electronically (typewritten, not by hand) and printed from their online location.
- Once all of the necessary signatures are collected, submit each form to the Graduate Program Coordinator.
- At the end of your comprehensive exam and each update, a memo -- that outlines the result, the issues that need to be improved upon, and when the next exam/update/defense is -- is to be distributed from your committee chairman to each committee member, the Graduate Program Coordinator, and yourself. It is your responsibility to make sure that this is done, as a copy of your previous memo is required at each new exam, update or defense.
- You need to keep a file throughout your studies here containing a copy of all official forms and memos for your records.
- You are responsible for keeping up communication with the department at all times. You are required to check your departmental email daily as most notifications are sent there first. You also need to check your departmental mailbox daily. Failure to keep up communication and/or meet obligations of departmental requirements can result in disciplinary action.
- You are responsible for meeting any and all deadlines for exams, updates, defenses, drop dates, graduation, etc.

APPENDIX 1

General Degree Requirement Timeline Ph.D. in Chemistry

Semester 1	Core Courses Topical Elective Seminar	Choose Research Advisor (Ph.D.)
Semester 2	Core Courses Topical Elective(s) Seminar Research	
Summer 1	Research	
Semester 3	Topical Electives Applied Courses Research	Petition for Committee (early in semester)
Semester 4	Topical Electives Applied Courses Research	Comprehensive Exam/Proposal Defense (Make room reservations for the exam date no later than mid-semester)
Summer 2	Research	Internship (time optional)
Semester 5	Research	Internship (time optional)
Semester 6	Research	Internship (time optional)
And beyond	Research	Internship (time optional)
“	“	“
“	“	“
Last semester	Finishing Research Preparing Dissertation	Apply to Graduate Dissertation Defense (May not do internship during final semester) (It is the responsibility of student to check the Graduate School Calendar weekly and to pay attention to deadlines including: Applying to graduate, Dissertation Defense, Dissertation Submission and final Graduate School checks, etc.)

APPENDIX 2

STEPS FOR AN INTERNATIONAL EMPLOYEE ON F1 OR J1 STATUS APPLYING FOR A SOCIAL SECURITY NUMBER

NOTE: H1B employees do not follow this procedure. They do not need the authorization form from the Office of International Education to apply for an SSN. They only need their H1B approval with I-94 card and passport.

APPLYING FOR THE SOCIAL SECURITY NUMBER:

1. Obtain and sign a *Request for SSN* form completed by your hiring department.
2. Take the request form to Office of International Education (OIE).
3. OIE will process the request within 7 business days and email you when the form is authorized and ready for you to pick up.
4. Take the authorized form with your immigration documents (I-20 or DS-2019), I-94 card and passport to the Social Security Administration (SSA) to apply for a social security number immediately. SSA Office location:
<https://secure.ssa.gov/apps6z/FOLO/fo001.jsp> Enter 76013 zip code.
5. Be sure you receive an application receipt from the SSA.
6. Take the application receipt to your hiring department to begin working.

The next two steps can be completed after Step 3 while you are waiting for OIE authorization.

7. Complete an employee packet without an SSN – leave it blank.
 - a. Non-benefits eligible (hourly) employees complete the packet with the department.
 - b. Benefits eligible employees attend a Human Resources paperwork session.
Contact Human Resources at 817-272-5554 for information.
8. Request a GLACIER password from Payroll Services. Email prf@uta.edu with full name, department of employment and position (monthly or hourly), visa status (F1, J1, H1B, etc.). GLACIER access information will be sent to you by email from support@online-tax.net. All international employees are required to complete the GLACIER tax program.
9. Your SSN card will be mailed to your home address. Be sure your mailbox has your name on it or the Postman will not deliver it. If you do not receive your SSN card within the time given on your application receipt, check with the SSA Office.

WHEN YOU RECEIVE YOUR SOCIAL SECURITY NUMBER:

1. Complete the GLACIER program using your SSN, print the forms from GLACIER and take your SSN card to Payroll Services with the GLACIER forms and required documents listed on the Tax Summary Report in GLACIER.
2. Payroll Services will contact your department and Human Resources with your social security number. **You do not need to take your SSN card to your department.**
3. You will be paid the next payroll cycle after all steps above are completed. **You will not be paid until you have a social security number.**

APPENDIX 3

STEPS FOR CONFERENCE REGISTRATION AND PURCHASE ORDERS

CONFERENCE REGISTRATION REMINDERS:

1. Please register for conferences well before the deadline. We cannot always accommodate last minute registrations (i.e. showing up at 4:30 pm for a 5:00 pm deadline...there are days when Natalie will have other business and will not be in her office, left early, etc.)
2. If the Conference does not accept credit cards, 30 day notice is required. Accounts Payable must cut and mail a check.
3. If it is an online registration, the student will need to fill out the registration on a laptop and bring to Natalie. She will put in the credit card information for the student and then the student will be able to submit the registration.
4. Please have your PI send Natalie an email stating they approve of this expense and include an account number (ideally before the student shows up in her office).

RTPs:

1. Natalie cannot process a request without written permission from your supervisor, please have your supervisor send Natalie an email approving the RTP or registration, including the account number where possible.
2. Please check with senior students and PDFs about how to fill out a RTP. Incomplete RTPs invariably get delayed. Then have it approved by the PI before it is turned into Natalie (otherwise she can't do anything with it).
3. Please indicate the account to be charged, as a number of mishaps have now occurred when this is left blank or some shorthand is used.
4. If using weblinks, such as on Amazon or Newegg, make sure that the entire link shows on the RTP or send it to Natalie in an email.
5. If the RTP is based on a quote, either forward the quote to Natalie by email or print a copy as she cannot place the order without it.
6. If an account number being used is a collaborative project with another department and we have no record of the account number in the Chemistry and Biochemistry Department, she needs to know who in that department to contact to check it out.
7. When submitting samples to outside labs (i.e. Intertek/QTI and Sequetech). A requisition number is supposed to be obtained prior to submitting and shipping samples. This number should be included on the company submission form, so we know who ordered what and who will be paying for it.

REMINDERS:

1. Fisher, VWR and Sigma all provide UTA discounts. While Natalie will try to ensure that the discount is received, it will be received if the student registers and 'logs in' to the vendors website, and they list the correct discounted price on the RTP.
2. Fisher and VWR have free shipping. Sigma generally costs \$23 or more per order. Most Alfa Aesar products can be found on Fisher by adding AA to the beginning of the catalog number. It's often cheaper than Alfa Aesar and the shipping is then free.
3. Students need to check the status of any order if it fails to arrive (most orders shouldn't take more than a week). Please check stockroom first, then go to Natalie.

