

# **Handbook for the MS Graduate Program**

## **Department of Chemistry**

## **Texas A&M- Commerce**

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## **I. INTRODUCTION AND OVERVIEW**

Welcome to the MS Graduate Program in the Department of Chemistry at Texas A&M-Commerce! The purpose of this Handbook is to give you a description of the departmental requirements for earning a M.S. degree in chemistry. General requirements for graduate degrees are given in the Catalog of the Graduate School for the current year; those requirements govern advanced degree study at all times. The requirements presented in this Handbook are intended to amplify and supplement those stated by the Graduate School, particularly as they pertain to the Department of Chemistry. Keep in mind that *you are subject to the Handbook that was current at the time that you enrolled*. If you have questions about your graduate program that the graduate catalog and this Handbook do not answer, then you should consult with your Research Advisor, the departmental Graduate Advisor, or the Dean of the Graduate School.

### **A. Some Introductory Information and Guidelines**

#### The Graduate Advisor (Dr. Laurence Angel)

The first point of contact for students in the graduate program is the program advisor who is a member of the Department of Chemistry faculty and is in charge of overseeing the orientation of newly enrolled graduate students and the progress of each graduate student as they advance through their degree programs.

The Graduate Advisor:

- 1) Signs the Program for the Master's Degree
- 2) Notifies you of your progress in meeting the degree requirements.
- 3) Assists you in requesting to have graduate courses transferred for credit at A&M-Commerce.

While the Graduate Advisor will help you to decide what courses you should enroll in during your first year of graduate studies, the Research Advisor that you choose in your first year will begin to play a major role in such decisions as you progress in your studies. The Graduate Advisor can act as an intermediary between you and the departmental faculty and as an intermediary between you and the Graduate School, in cases where you need such an intermediary. It is important to emphasize that your Research Advisor will become your principal advisor/mentor once you take the important step of joining a research group.

#### Chemistry Proficiency/General Chemistry ACS Examination

New students who plan to take graduate courses will take the general chemistry examination before the beginning of the first semester. The exam is strictly diagnostic, and will serve to illuminate the student's chemistry background. Your performance on the exam will help to guide your first semester's coursework selection.

## Some Basic Requirements for Graduate Study in the Department of Chemistry.

Every student who is pursuing an M.S. degree in this department must, in order to attain or maintain their eligibility for their degree, do the following:

- 1) Be registered as outlined below.
- 2) Meet the deadlines indicated in this Handbook for the degree requirements.
- 3) Submit a degree plan by the deadlines listed.
- 4) Maintain a GPA of 3.0 or higher in graduate coursework.
- 5) Complete the required number of credit hours (SCH) for the degree.
- 6) Complete the Final Examination requirement to the satisfaction of the student's Advisory Committee by the established deadline.
- 7) Complete all required training in a timely manner.

### **B. Registration Requirements, Coursework, and Grading**

#### Registration Requirements

##### **1) University Enrollment Requirements**

*Full-time Study:* “Students must be enrolled full time (at least 10 hours for thesis students and 9 hours for non-thesis students in each long term, 3 hours in each relevant summer session) to be eligible to hold fellowships, teaching assistantships, graduate part-time instructorships, research assistantships, or other appointments designed for the support of graduate study, as well as to qualify for certain types of financial aid. The exception is the last semester before graduation, where the student must be enrolled in at least 3 hours. This situation must be approved by the Research Advisor. All international students are required by law to have full-time enrollment in every long semester. Graduate students who have earned an undergraduate degree but who will take only undergraduate courses may not be appointed to teaching assistantships, graduate part-time instructorships, or research assistantships. If a student is devoting full time to research, utilizing university facilities and faculty time, the schedule should reflect at least 9 hours enrollment (at least 3 hours in each summer session). Enrollment may include research, individual study or thesis.

*Continuous Enrollment:* “Each student who has begun thesis research must register in each regular semester and at least once each summer until the degree has been completed, unless granted an official leave of absence from the program for medical or other exceptional reasons.”

##### **2) Chemistry Seminar Enrollment Requirements**

*M.S. Thesis Students:* Registration in four different semesters (CHEM 501) is minimally required. Ordinarily this requirement is fulfilled during the first two years of graduate

study. However, if the literature seminar requirement is not satisfied at the end of the fourth semester of enrollment, continued enrollment in CHEM 501 is required until the literature seminar requirement is satisfied.

Graduate credit hours must be distributed so that there are at least

***Masters Thesis Candidates:***

- 24 graduate level science lecture course hours
- 4 hours in graduate seminar (CHEM 501)
- 6 hours in Master's Thesis (CHEM 518)

***Masters (Non-Thesis) Candidates:***

- 33 graduate level science lecture course hours
- 3 hours in Research Lit & Techniques (CHEM 595)

After completion of the science lecture course hours, a comprehensive exam (6-hours) covering three core chemistry subjects (or if the student does not have three core courses in chemistry one of the exams will come from an elective course chosen with approval from the faculty) is also required at the end of the Non-Thesis program. An average grade of B or better is required for a passing grade of the comprehensive exam.

## **C. Choosing a Research Advisor and Advisory Committee**

### Your Research Advisor

During your first long semester, you must select a Research Advisor, the professor with whom you will do research work in your graduate career. This professor becomes your primary advisor and is in charge of your work and your program. Your Research Advisor is the key person in your graduate work. To acquaint yourself with the research activities of the faculty, you must talk with at least three professors, before making a choice, and have the research advisor form signed by each of the three professors. Once you have obtained the signatures of three professors, submit the form to the graduate advisor.

You are urged to consider all factors carefully before making this important choice. It is often helpful to talk to experienced graduate students, especially those working with professors being interviewed, in order to get their opinions. Remember, also, that many professors have research projects in areas outside the area of their normal teaching duties.

### Your Advisory Committee

The advisory committee is the group of faculty who, along with your Research Advisor, will evaluate your progress toward your degree, offer guidance on your research project, and assess your qualifications for the degree via oral examination.

The advisory committee for the Master's degree study must consist of at least three individuals, your Research Advisor (the chair of the committee) and at least two other members of the Chemistry faculty or related science faculty.

You choose your advisory committee by considering, with the advice of your Research Advisor, a list of faculty whom you think would be most appropriate (based on the nature of your research project), then asking each of those faculty if he/she would be willing to serve on your committee. (In some cases, a faculty member will decline serving on your committee due to impending absences from the department or other circumstances). The members of your committee will be listed on the thesis proposal that you will submit to the Graduate School.

If a member of your committee leaves the university, or for some reason can no longer serve on your committee, then you can replace him/her with another faculty member, and notify the Graduate School of this change by consulting with your Graduate Advisor.

### Research Proposal

After you have received the necessary skills and experience in designing and conducting research in your chosen field, you will develop a Research Proposal (RP) with the guidance of your Research Advisor. On completion of the RP, you will submit your RP to the advisory committee ***at least a week before the oral research proposal defense and two semesters, including summer, before your final thesis defense.***

The process by which a M.S. student obtains preliminary approval of his/her research proposal from his/her advisory committee members is as follows.

- 1) The committee members will provide a preliminary evaluation of the research proposal within seven days of its acceptance from the candidate for review.
- 2) If a committee member feels that major changes are required, this will be communicated to the candidate within the seven-day period. Such major changes will have to be made by the student and the committee members will have another seven days to evaluate the revised research proposal once they accept it for review.
- 3) If only minor changes are required, the committee member will give preliminary approval to the oral research proposal defense.
- 4) If the candidate receives no communication from a committee member by the end of the seven-day period, it will be assumed that committee member has given preliminary approval to the oral research proposal defense.

### Submission of your Thesis to the Advisory Committee

After you have completed all the work towards your thesis and have gained approval from your Research Advisor ***you must present copies of your thesis to your Advisory Committee at least a week before the oral examination.***

The process by which a M.S. student obtains preliminary approval of his/her thesis from his/her advisory committee members, prior to the scheduling of his/her Final Oral Examination, is as follows.

- 1) The committee members will provide a preliminary evaluation of the thesis within seven days of its acceptance from the candidate for review.
- 2) If a committee member feels that major changes are required, this will be communicated to the candidate within the seven-day period. Such major changes will have to be made by the student and the committee members will have another seven days to evaluate the revised thesis once they accept it for review.
- 3) If only minor changes are required, the committee member will give preliminary approval to the thesis. (Note that some modifications of the thesis will undoubtedly still be required after the thesis defense. However these will be of a relatively minor nature and will not involve, for example, the rewriting of an entire chapter.)
- 4) If the candidate receives no communication from a committee member by the end of the seven-day period, it will be assumed that committee member has given preliminary approval to the thesis.

#### Final Oral Examination for M.S. Degree

As soon as a date and time has been arranged with your committee members for your Final Oral Examination, you need to reserve the room through the appropriate departmental personnel. The Final Oral Examination must be announced on the weekly departmental seminar list. ***The title, as well as a copy of an abstract, should be given to the appropriate departmental personnel at least 1-week before your Final Oral Examination.***

The Final Oral Examination consists of an oral presentation, in seminar format, of your research results, followed immediately by an oral examination session in which your committee members ask you questions about your research project and related subjects. The presentation for the M.S. degree will be open to the public.

Following the oral examination, your committee will decide if you have passed the examination or not, and they will recommend changes in your thesis based on their reading of it. When your committee has decided that you have passed the examination and you have corrected the thesis according to their instructions, you must prepare a final copy of your thesis and submit it to the Graduate School for their approval. It is important that you pay close attention to the deadlines and thesis format requirements set by the Graduate School when you are completing your M.S. degree requirements.