

Department of Chemistry and Biochemistry

Graduate Student Handbook

Welcome to the department: If you are a new graduate student just joining the department we want you to feel welcome and get off to a great start of a successful graduate career at WSU. This handbook is intended to serve as a useful guide during your graduate studies in the department. Below is a timeline of the events and steps you will need to navigate on your way to a MS or PhD degree. In addition to this handbook you should seek regular advising appointments with your research mentor and the department's graduate coordinator. **See page 12 for contact information.**

Your Arrival at WSU

If you are an international student arriving in Wichita the Office of International Education will be a valuable connection to make. They can provide you with connections to student groups in your area of study or from your home country. These groups may be able to help you find housing, roommates and other useful connections. The International Office's web site is:

<https://www.wichita.edu/admissions/international/index.php>

IMPORTANT: International students with GTA/GRA appointments need to arrive at least one month earlier than the position start date to allow sufficient time for obtaining a social security number. If you are arriving at WSU without a social security number you should immediately work with the department and Office of International Education to begin the steps toward acquiring a social security number (SSN). An SSN is issued and required by the federal government before you can begin working and being paid. The steps to obtaining an SSN can be found here:

https://www.wichita.edu/admissions/international/current_students/obtaining_social_security.php

Please remember that your SSN should only be shared with your employer's human resources department, the U.S Internal Revenue Service and some financial institutions such as your bank or investment firm. Unless somebody is paying you wages for a job or is paying you interest on money you have in the bank, it is illegal for them to ask you for your SSN. Do not give your SSN to any others.

Getting Settled at WSU

Moving to a new city and starting a new program of study is a challenge for all new students. During this transition, as well as throughout your program, we want you to know that you are not alone. Important resources exist to help you deal with housing, staying food secure and mentally and physically fit. The Department of Chemistry and Biochemistry faculty and staff are always here to help you with resources and advising for teaching and research. When other challenges arise the following may be helpful:

Assistance in Finding Housing: New students must arrange their own housing. This may be done by connections that the student has through current WSU students or by seeking housing either on campus or off. For on campus housing the student can contact

Here is a resource for off campus housing that is maintained by the Office of International Education and provides updated contact to housing opportunities near the campus:

https://www.wichita.edu/admissions/international/documents/Updated_Off-Campus_Housing_list.pdf

For on-campus housing contact the WSU Housing and Residence office:

https://www.wichita.edu/student_life/housing/

Another useful resource for international students can be the various international student groups. Their members can help you when arriving and settling in and put you in touch with a network of friends from your home country. At this site you can find a list of WSU International Student Associations along with Faith-Based Organizations:

<https://www.wichita.edu/admissions/international/internationalstudentassociations.php>

Shocker Support Locker: This is a student initiative that provides food, clothing and toiletries and baby/family products free of charge to the WSU community. This is a good resource should you find yourself financially overtaxed and in need of basic supplies:

Shocker Food Locker: https://www.wichita.edu/student_life/sga/Shocker_Food_Locker.php

Mental Health and Wellbeing: We all need helpful advice, counseling and guidance throughout our careers. Graduate school is a time when many of us find mentors who may be a part of our professional lives as advisors, colleagues and constructive critics. Try to form these relationships with the other scientists around you, but also be aware that there are other facets of our lives where problems crop up that require professional help, such as depression or substance abuse. If you find yourself feeling overwhelmed or alone or simply need to talk over personal issues with a professional, you can find help at the Counseling and Prevention Services.

Counseling and Prevention Services:

<https://www.wichita.edu/services/counseling/Counseling1/CounselingServices.php>

Health Services: Student health services and access to the YMCA are included in your student fees. Low cost prescriptions and over the counter medication are available at student health.

Graduate Program Timeline for MS and PhD

This time line is intended to serve as a table of contents for the entire document. As you read through the time line note the page references to additional materials addressing many of the items

Upon Entering the Program

The following steps should all take place shortly after your arrival at WSU and before classes start during your first semester.

1. Assessment exams. Approximately two weeks before classes start all new graduate students take five standard exams in the areas of analytical, biochemistry, inorganic, organic and physical chemistry. Students must pass four exams. For further details see pages 5 and 13.
2. If you are offered a graduate teaching assistant (GTA) position, you are required to complete the GTA training offered at the Graduate School and by the department. See pages 5-6.
3. Contact the appropriate instructors and lab coordinators in preparation for graduate teaching assignments. See page 6.
4. Have three Spoken English Screening Forms completed and turned in to the main office. See page 18.

Timeline for PhD Program (See page 4 for the timeline of MS program)

YEAR 1

1. Complete **Research Advisor Check Sheet** before the end of the 1st semester. See pages 6 and 14.
2. Complete **Professional & Scholarly Integrity Training** before the end of year 1. See page 6.
3. **Course enrollment and removal of any assessment**
 - The graduate coordinator will meet to discuss any undergraduate courses you may need to make up for deficiencies from the assessment exams.
 - 1st semester: CHEM 701, CHEM 734, one core course, and one focus course.
 - 2nd semester: CHEM 701, one core course, and one focus course.
 - You may enroll for CHEM 700. MS students must complete one enrollment of CHEM 700. PhD students must complete two enrollments of CHEM 700.

YEAR 2

1. Complete **Plan of Study** before the end of your 3rd semester.
2. Start taking **cumulative exams** (PhD only). You must pass 5 cumulative exams. See page 9.
3. **Course enrollment**
 - 3rd semester: CHEM 701, one core course, and one focus course.
 - 4th semester: CHEM 701 and one core course.

YEAR 3

1. If pursuing a PhD - submit and defend your **Creative/Independent Research Proposal** before the end of your 5th semester. See page 9-10.
2. After successful proposal defense, students in the PhD program may be awarded an MS degree along the way to PhD. (See pages 10 and 15).
3. If you haven't passed cumulative exams (PhD only), continue taking cumulative exams.
4. After passing the cumulative exams and successfully defending the creative/independent research proposal, the student will have qualified as a candidate for the PhD in chemistry and

must be enrolled in at least 2 credit hours of Research in Chemistry (CHEM 990) each semester for the duration of the program.

5. **Course enrollment**

- 5th semester: CHEM 701 and one core course.
- 6th semester: CHEM 701 and minimal 2 credit hours of CHEM 990.
- You may enroll for CHEM 700.

YEAR 4-5

1. Prepare for dissertation. See page 12.
2. Complete **dissertation defense**.
3. **Course enrollment**
 - Each semester: CHEM 701 and minimal 2 credit hours of CHEM 990.
 - Enroll for CHEM 700, if you haven't completed two enrollments of CHEM 700.

Timeline for MS program

YEAR 1

1. Complete **Research Advisor Check Sheet** before the end of the 1st semester. See pages 5 and 13.
2. Complete **Professional & Scholarly Integrative Training** before the end of year 1. See page 5.
3. **Course enrollment and removal of any assessment**
 - The graduate coordinator will meet to discuss any undergraduate courses you may need to make up for deficiencies from the assessment exams.
 - 1st semester: CHEM 701, CHEM 734, one core course, and one focus course.
 - 2nd semester: CHEM 701, one core course, and one focus course.
 - You may enroll for CHEM 700. MS students must complete one enrollment of CHEM 700.

YEAR 2

Note for MS: The department usually offers two graduate courses each semester, one core course and one focus course. An MS student may complete their classroom course requirements in just two years. After completing your classroom courses you will continue to enroll in CHEM 701 and CHEM 890 each semester until you have defended your thesis.

1. Complete **Plan of Study** before the end of your 3rd semester.
2. **Course enrollment**
 - 3rd semester: CHEM 701, 890 and courses above 700 in consultation with your advisor. You should be at or approaching the 15 credit hours of 700 level course work at this point. See page 10.
 - 4th semester: CHEM 701 and 890.
 - Enroll for CHEM 700, if you haven't completed one enrollment of CHEM 700.
3. You may defend in your second year but consult with your advisor to plan for your thesis defense by end of the third year.

YEAR 3

1. Prepare for thesis. See page 10.
2. Complete **thesis defense**.
3. **Course enrollment**
Each semester: CHEM 701 and CHEM 890.

Assessment Exams

Graduate student assessment exams are given in August and January, usually two weeks prior to the start of class. They consist of five exams administered over a four day period. *All new graduate students must take these exams.* The announcement for the exam schedule will be sent to each new student prior to their arrival in the department. An example of the announcement is given on page 13. The purpose of the exams is to evaluate each student's knowledge in the five areas of chemistry: analytical, biochemistry, inorganic, organic and physical. A student must show proficiency in four of these areas before the end of their second semester, excluding summer. To demonstrate proficiency in an area requires either passing the assessment exam or taking and passing the corresponding undergraduate course with a grade of B or better. Each student will have two opportunities to pass four of the five exams.

After taking the exams and receiving their scores all students meet with the graduate coordinator for course enrollment advising. **Failure to pass four placement exams or the corresponding course during the 1st year results in automatic recommendation for dismissal to the Graduate School.**

Assessment exams and corresponding undergraduate courses		
<i>Exam</i>	<i>Corresponding Course</i>	<i>Course Offered</i>
Analytical	Chem 523	Fall
Biochemistry	Chem 661	Fall and Spring
Inorganic	Chem 615	Spring
Organic	Chem 532	Fall, Spring and Summer
Physical	Chem 545	Fall

It is advisable for students to study for these exams to avoid taking undergraduate courses. Students who are required to take undergrad courses can substantially deter their academic progress and may add extra semesters and expense to their course work.

Graduate Assistant Training

There are multiple required training for graduate assistants, including GTA training, professional integrity training and safety training. The Graduate School offers orientation and required training for all new graduate students and teaching assistants. *Training is required for all new GTA's.* The schedule for training can be found on the Grad School's Professional Development web page:

www.wichita.edu/pds

The link above will also provide you with information about many other activities sponsored by the Grad School including social gatherings and award opportunities.

Department GTA training is offered on an as-needed basis and will be announced through the department office. This training includes required safety training and discusses best practices in the chemistry teaching lab.

Professional and Scholarly Integrity Training Requirement: All doctoral and masters students are required to complete this training by the end of their first year. The Chemistry and Biochemistry graduate programs only require the CITI modules. Please visit this page for details:

[https://www.wichita.edu/academics/gradschool/GraduateFaculty/Scholarly and Professional Integrity Training Requ.php](https://www.wichita.edu/academics/gradschool/GraduateFaculty/Scholarly_and_Professional_Integrity_Training_Requ.php)

You will get regular e-mails from the staff in the Graduate School. Be sure to read these because they contain useful information.

Mentor Selection

Choosing a research mentor is an important step in every graduate student's career. The best way to make an informed choice is to meet with different potential research mentors and their students. All newly admitted graduate students should schedule a meeting with each research group mentor and obtain their signature on the Chemistry and Biochemistry Research Group selection form (see page 14 for an example). New graduate students should complete this process before the beginning of their second semester.

GTA Positions

Requirements for GTA Positions – All students who are admitted to the graduate program in good standing are eligible for a GTA position provided they have work authorization and the required English abilities as determined by standard tests. Work authorization requires the issuance of a social security number. English requirements are met by scoring a 23 or better on the speaking portion of the TOEFL or a score of 7.0 or higher on the speaking portion of the IELTS exam. GTAs (0.5 FTE, 20 hours) are normally assigned two laboratory sections, which are often in the same course, but not always. Teaching performance will be taken into consideration when renewing GTA awards. Termination prior to expiration of the appointment can be made for reasons such as failure to comply with the supervisor's teaching directive, failure to adhere to reasonable teaching and safety practices and unprofessional interaction with students.

All GTAs must also have three Spoken English Screening Forms signed. Two of these are to be completed by two faculty or staff and one student. See page 18.

GTA positions are awarded to students based on department need. Preference is given to students in good standing and on-track for their degree. A GTA position is not a guaranteed job and should not be taken for granted. Students who have had problems or completed their assignment poorly may not be selected to TA in subsequent semesters. Masters students who have received six or more GTA appointments and PhD students who have received ten or more will be given less priority when GTA

assignments are made. Graduate students whose GPA drops below 3.0 are not eligible for a GTA position without an approved exception from the Graduate School.

The GTA selection process begins when the department e-mails a GTA preference form to all eligible graduate students (see page 16 for an example). The department chair, in consultation with the lab coordinators, makes the GTA assignments using the returned preference forms as a guide. It is important that upon notification of a student's teaching assignment that they contact the lab coordinator for instruction regarding the curriculum and TA meetings.

The GTA position comes with a number of important responsibilities and expectations. These positions are only possible because of the large number of undergraduate students who take our classes. Therefore, it is important to provide the lab students with a high quality learning experience. The GTA is critical in this experience. It is important to realize that this position is a professional job in which you must be reliable, punctual, prepared and respectful. It is the GTA's duty to provide a safe and educational lab experience while providing rigorous and timely feedback in the form of graded quizzes, reports and exams. To achieve this the GTA should maintain a respectful relationship with the students in their sections, their fellow GTAs and with the lab coordinators. A full time GTA position is a 20 hour per week appointment that requires a number of important duties including 1) attending all recitations for assigned sections, regardless of who is presenting that week, 2) arriving early and prepared for all lab sessions, 3) grading promptly, rigorously and fairly, 4) attending weekly TA meetings, 5) holding a weekly office hour and one hour of open office hours in MC 223, and 6) responding to student concerns and e-mails.

GRA Positons

Graduate research assistantships are usually arranged with a professor who is willing to support a student with external grant funding. Some GRAs can also be arranged through the department when available, these include assistantships for running MS or x-ray samples for the department. GRA positions may be full time (20 hours) or half time. A student may hold a half time GRA and a half time GTA.

Research Responsibilities

Thesis or dissertation research forms the core of the graduate experience and provides students with the opportunity to establish depth of knowledge in their chosen area. With this opportunity come a number of important responsibilities.

Graduate students are expected to:

1. Be hard working, diligent, responsible and dependable.
2. Plan experiments in advance.
3. Participate in general lab maintenance and perform routine clean up jobs.
4. Interact in a neighborly fashion with other group members and be aware of their needs.
5. Follow the instructions of their faculty mentor.
6. Nonnative English speakers should make every effort to improve their mastery of the English language, particularly their verbal skills.
7. Become familiar with the literature in their area of research.

8. Diligently follow proper safety and laboratory notebook procedures. Students doing research in the evening and/or weekends, must exercise strict safety practices, and should preferably work with a fellow graduate student in the same lab or an adjacent lab.
9. Keep laboratory notebooks in a safe place in the research laboratory. The notebook should be organized and kept in accordance with your research mentor's directions.
10. Comply with the directive that the results of research, including but not limited to, spectra, notebooks, etc. belong to the research mentor as an agent of Wichita State University.

The faculty research advisor (mentor) will judge compliance with these guidelines and may take appropriate action to correct a problem up to terminating a GRA and dismissal from his/her research group.

Scientific Misconduct/Unethical Practices

Students should perform their research and pursue their graduate studies with honesty, integrity and diligence. Student's behavior in the classroom is governed by the Student Code of Conduct (WSU Policy and Procedures 8.05). Violations of classroom standards are:

1. Cheating in any form, whether in formal examinations or elsewhere.
2. Plagiarism, using the work of others as one's own without assigning proper credit to the source.
3. Misrepresentation of any work done in the classroom or in preparation for class.
4. Falsification, forgery, or alteration of any documents pertaining to academic records.
5. Disruptive behavior in a course of study or abusiveness toward faculty or fellow students.

University Guidelines for Responsible Research Conduct are outlined here:

https://www.wichita.edu/research/ResponsibleConductofResearch/Responsible_Conduct_of_Research.php

University guidelines for student academic integrity are here:

https://www.wichita.edu/about/policy/ch_02/ch2_17.php

"Misconduct in research" means fabrication of data, falsification, plagiarism, or other practices that deviate from those that are commonly accepted within the scientific community for proposing, conducting, or reporting research. Students that engage in unethical practices such as, for example cheating and plagiarism, while conducting their research and/or their coursework are subject to loss of financial support, suspension and/or dismissal from the university. Allegations regarding scientific misconduct and/or unethical practices should first be reported to the student's advisor in writing, and a copy given to the department chair and the graduate affairs committee chair for further action.

Diversity and inclusion are important initiatives at WSU. Grad students are required to take Title IX training. This training ensures that our students, faculty and staff provide a equitable and inclusive environment for our diverse university community. The Title IX policy statement and other useful information are found here:

<https://www.wichita.edu/administration/oiec/titleixstatement.php>

Graduate Fellowships

The department disperses certain funds annually that are received from the Graduate School and the WSU Foundation. A significant amount of these funds are awarded to graduate students as summer support. A few are awardees are named Fellowships, including the Talaty and Zaid fellowships. The latter two are typically competitive and require an application packet submitted to the department. The competitions are announced via the Chemistry Office.

Plan of Study

The graduate plan of study form should be completed at the beginning of your second year. This form outlines the courses you have completed or are in the process of completing to satisfy the degree requirements. This is also the point at which you will identify the members of your thesis or dissertation committee. The form can be found at Graduate School web site and should be filled out in consultation with your advisor and then submitted to the department and Graduate School. Please follow all instruction on the form and be sure not to exceed the number or allowed credit hours for your degree (30 for the MS and 72 for the PhD). See page 11 for a description of the courses that are required for the MS and PhD.

The Plan of Study forms can be obtained here:

<https://www.wichita.edu/academics/gradschool/DegreeCompletion/PlanofStudy.php>

Cumulative Exams (PhD only)

Students in the PhD program must begin taking cumulative exams at the start of their second year and after satisfying the assessment exams. Students must pass five cumulative examinations out of 12 attempts to remain in the PhD. program. Three cumulative examinations (cumes) are offered each semester and are intended to help students keep abreast of scientific literature and develop up-to-date methods of solving problems encountered in their chosen field of research. Successful completion of five cumulative examinations out of the maximum of 12 is deemed sufficient evidence of a student's development in this area. At least three of the passed cumes must be in the student's main subject area. The cumes are typically given in the months September, October, and November in the fall semester and February, March, April in the spring semester. Once a student begins taking cumes, they must take each offered cume until passing five.

At least one month before each cumulative exam date, the office will post a sign-up sheet at the main desk and announce it by e-mail. Students will sign up for the cumulative exam of their choice and professors will post one or more literature citation that will be covered on the cume. The cumes will be administered by a proctor on a Saturday morning and graded by the faculty member who wrote the cume. The results will be distributed by the office.

Independent proposal (PhD only)

After successfully completing the cumulative exams, students must develop and orally defend an original research proposal during their fifth semester. Original is defined as a proposed project that was conceived and developed by the student and is different from their dissertation research. A student's proposal can utilize the physical methods of their dissertation research, if desired. The scientific question

or hypothesis addressed by the proposal must not be related directly to any research projects that their mentor has done in the past, is doing currently or is planning to do in the future.

The guidelines below are from the *NIH Quick Guide for Grant Applications* which can be found on the NIH web site. The page limits are maxima that should not be exceeded:

- 1) Project Summary (1 page): The purpose of the Project Summary/Abstract is to describe succinctly every major aspect of the proposed project. It should contain a statement of objectives and methods to be employed. Consider the significance and innovation of the research proposed when preparing the Project Summary.
- 2) Research Plan/Strategy (do not exceed 12 pages total): This is the main portion of the proposal and should include the following sections:
 - a. Specific Aims (1 page): The specific aims should cover: broad, long-term goals; the specific objectives and hypotheses to be tested; summarize expected outcomes; and describe impact on the research field.
 - b. Significance (1-2 pages): The Significance section should explain the importance of the problem or describe the critical barrier to progress in the field that is being addressed. Explain how the proposed research project will improve scientific knowledge, technical capability, and/or clinical practice in one or more broad fields. Describe how the concepts, methods, technologies, treatments, services, or preventative interventions that drive this field will be changed if the proposed aims are achieved.
 - c. Innovation (1/2-1 page): Explain how the application challenges and seeks to shift current research or clinical practice paradigms. Describe any novel theoretical concepts, approaches or methodologies, instrumentation or interventions to be developed or used, and any advantage over existing methodologies, instrumentation, or interventions. Explain any refinements, improvements, or new applications of theoretical concepts, approaches or methodologies, instrumentation, or interventions.
 - d. Approach (9-10 pages): : The purpose of the approach section is to describe how the research will be carried out. This section will contain an overview of the experimental design, description of methods and analyses, expected results and alternative approaches. Be sure to have a detailed discussion of the way in which the results will be collected, analyzed and interpreted.
- 3) Literature Cited (no page limits): Should include all literature references used throughout your proposal. This does not require a specific format, but should be consistent.

This exercise is meant to help a student develop their ability to think and plan advanced research projects. During this process the student prepares a proposal written in the style of an NIH or NSF proposal embodying a new and independent research problem and methods of achieving a solution to that problem. The graduate student is expected to independently identify the proposal's aims, conduct the literature survey necessary to support their aims. The proposal should be written without their mentor's input. The student then defends this proposal before his or her dissertation committee.

Before preparing the proposal the student must provide the Graduate Affairs Committee with a title and one page abstract for their independent proposal. This abstract is given to the committee along with the student's description of their dissertation research project(s). The committee examines the proposal abstract to ensure that it does not overlap substantially with their own dissertation research according to the guidelines given above. The research proposal must not duplicate the student's dissertation research

as determined by the Graduate Affairs Committee. This is to ensure that the proposed project is the student's original ideas.

After the proposal topic has been approved by the Graduate Affairs Committee the student should contact all of the committee members to notify them of their topic and arrange a time for the proposal defense. The written proposal must be distributed to their dissertation committee at least one week before the defense date.

The PhD student may be asked to redo the defense and/or written paper once. Failure of this second chance results in removal from the PhD graduate track.

Research Seminar

PhD students are required to enroll twice in Chem 700. During the second enrollment the PhD candidate will give a 20-25 minute department seminar during the department colloquium. The student should work with the department and colloquium organizer to announce their talk. The seminar should cover their current research accomplishments and the planned research for their dissertation. An important goal of this seminar is to inform the student's committee about their progress and plans and is one of the few times the student will meet with their entire committee.

After passing the cumulative exams, successfully defending the original research proposal, and presenting their department seminar, the student will have qualified as a candidate for the PhD in chemistry and must be enrolled in at least 2 credit hours of Research in Chemistry (CHEM 990) each semester for the duration of the program. The student is also now eligible to obtain a non-thesis MS degree, also called the "masters along the way" degree.

Masters Along the Way (PhD only)

Students in the PhD program in good standing, who have completed all required courses, have satisfactorily presented their departmental research seminar, have defended their creative research proposal, and have satisfied all other requirements for admittance to candidacy for the PhD degree, will upon request and approval by the student's committee be awarded the MS degree. The necessary form is shown on page 15 and is available from the department office.

Graduate Courses

The graduate course requirements, including transfer courses can be found here:

<https://www.wichita.edu/academics/gradschool/DegreeCompletion/DegreeRegulations.php>

Graduate students must earn a grade point average of at least 3.00 in all courses on the student's WSU plan of study (excluding transfer work) AND for all graduate work taken at WSU. Grades lower than C, including C-, cannot be used to satisfy degree requirements, but such grades earned may be repeated.

Upper division (600 and above): Upper division courses from other department and colleges can be approved for a student's plan of study provided these course are 600 and above and are relevant to the student's area of study

For graduate students, 9 graduate credit hours is considered a full load. Full time (20 hour appointment) GTAs and GRAs are considered enrolled full-time if they are enrolled in 6 credit hours while holding the appointment.

Courses for MS

CHEM 890 (Research in Chemistry), at least 15 credit hours in chemistry courses numbered above 701, including: CHEM 734 (Instrumental Methods for Research), at least three of the graduate chemistry core courses (CHEM 715 – CHEM 722), CHEM 700 (Chemistry Seminar), Enroll in CHEM 701 (Chemistry Colloquium) every semester of the degree program, additional courses in consultation with major advisor and the department.

Courses for PhD

Chem 990 (Research in Chemistry) Core Courses: CHEM 715 (Advanced Spectroscopy), CHEM 719 (Modern Synthetic Methods), CHEM 721 (Advanced Biochemistry), CHEM 722 (Advanced Physical Chemistry), CHEM 734 (Instrumental Methods for Research). Focus Courses: two to three focuses courses numbered above 701 and/or the following: CHEM 717 (Advanced Spectroscopy II), complete two enrollment in the following: CHEM 700 (Chemistry Seminar), enroll the following every semester: CHEM 701 (Chemistry Colloquium)

Dissertation and Thesis Defense

The final requirement for both the MS and PhD degrees is the defense of a thesis based on original research. Well-prepared entering students should be able to complete the requirements within two to three years for an MS and four to six years for a PhD. Guidelines and examples for thesis preparation are available from your advisor or the department. The Graduate School publishes a guide to preparing your thesis/dissertation that is available online:

https://www.wichita.edu/academics/graduate_school/documents/ThesisDissertationManual.pdf

Your advisor will be the primary reviewer of the original draft. Once your advisor has approved the draft then you schedule a defense through the graduate school. It is advisable to contact your committee members well ahead of your planned defense date and work with them to find a date and time where all are available. Once that time is selected you will work with the department to schedule a room for the defense and to advertise your public talk. At this point you should contact the Graduate School and they will send an announcement to your committee members and provide your advisor with the required paperwork.

The written dissertation must be provided to all committee members at least two weeks before the oral defense. The department office should be notified of the defense date, time and room number and the dissertation title so that they can advertise the public defense through proper channels.

All defenses start with a public talk after which the public is excused and you continue with an examination consisting of questions posed by your committee. There are multiple possible outcomes from a defense: 1) the student may pass outright and the committee signs off on the approval for both the written document and the oral defense, 2) the committee requests some changes or additions to the written document based on omissions, corrections or failure to demonstrate specific knowledge, 3) the committee deems the work insufficient and requires the candidate to complete more experiments or analysis before passing, 4) the committee deems the work insufficient in quality or quantity for the degree and the candidate fails, 5) concerns arise regarding ethical or compliance issues that are serious enough that the committee fails the candidate. The first two outcomes are by far the most common but it is ultimately the decision of the committee whether the candidate passes this required step in earning their advanced degree.

Contact Information

Department Chair	Doug English	978-3238	doug.english@wichita.edu
Graduate Coordinator	Dennis Burns	x7375	dennis.burns@wichita.edu
Chemistry Office	Margene Webster	x7360	margene.webster@wichita.edu
Stock Room	Susan McCoy	x7362	susan.mccoy@wichita.edu
Instrumentation Manager	Kevin Langenwalter		kevin.langenwalter@wichita.edu
Campus Police		x3450	
Graduate School		x3095	
International Office		x3232	

MEMORANDUM

TO: Chemistry Graduate Students and Faculty
FROM: Dr. Dennis Burns, Chair Graduate Affairs Committee
DATE: June 1, 2021
RE: Fall 2021 Assessment Examinations

Assessment Exams Schedule

Physical Chemistry	Tuesday, August 3, 2021, 1:30 pm, Conference Room
Analytical Chemistry	Wednesday, August 4, 2021, 9:30 am, Conference Room
Organic Chemistry	Wednesday, August 4, 2021, 1:30 pm, Conference Room
Inorganic Chemistry	Thursday, August 5, 2021, 9:30 am, Conference Room
Biochemistry	Thursday, August 5, 2021, 1:30 pm, Conference Room

If this is your first semester as a graduate student, you are required to take all of the assessment exams during this week. All assessment exams are about 2 hours long. It is strongly recommended that you review the subject matter before taking these exams. A list of appropriate books is given below.

Analytical Chemistry

General Textbooks:

“Analytical Chemistry”, Skoog, West, and Holler, 7th Ed.

“Quantitative Chemical Analysis”, Harris, 5th Ed.

Instrumental Books:

“Instrumental Methods of Analysis”, Willard et al., 7th Ed.

“Principles of Instrumental Analysis”, Skoog, Holler and Nieman, 5th Ed.

Organic Chemistry

“Organic Chemistry”, Morrison & Boyd

“Organic Chemistry”, Solomons, 6th or 7th Ed.

“Organic Chemistry”, Vollhardt, 3rd Ed.

Inorganic Chemistry

“Inorganic Chemistry”, Huheey

“Inorganic Chemistry”, Miessler & Tarr

Biochemistry

Lehninger, “Principles of Biochemistry”, Worth, 3rd Ed.

Stryer, “Biochemistry”, 3rd ed., Freeman

Van Eikeren, “Guide to Lehninger’s Biochemistry”, Worth

Voet and Voet, “Biochemistry”, Wiley

Physical Chemistry

“Physical Chemistry”, Atkins, 6th ed. (1998)

“Physical Chemistry”, Mortimer, 2nd ed. (2000)

“Physical Chemistry”, Woodbury, 1st ed. (1997)

“Basic Physical Chemistry”, Moore, 1983

Spoken English Screening Form

Reset Form

Revised: 2/19/2020

Candidate's / Employee's Name: _____

Department: _____ Date: _____

WSU ID#: _____

Assessment Setting (check one):

☐ Seminar ☐ Regular Class ☐ Oral Presentation ☐ Other _____

The assessment must be conducted prior to appointment by at least three evaluators: two (2) faculty or staff and one (1) student. Each evaluator must submit a separate form.

Place a check beside the description which best matches the spoken English of the candidate.

Spoken English is:

1. ☐ Competent (clearly understandable)
2. ☐ Competent (acceptable for classroom)
3. ☐ Understandable with difficulty (students would have trouble understanding candidate)
4. ☐ Not understandable (students would not understand the candidate)

WAIVER: The above named person is a visiting one-year exchange scholar or non-employee international scholar.

Signature of Supervisor_____
Evaluator's Signature_____
Evaluator's Name (printed) and Position

NOTES:

- A rating of 1 or 2 indicates competency in spoken English and is required.
- A rating of 3 or 4 indicates the candidate's spoken English would impede the teaching of students and means the candidate must take the Test of Spoken English (TSE) with a passing score of 50 or above.
- A report of Spoken English Proficiency is submitted to the Kansas Board of Regents every other year.

Please return this form to Academic Affairs at Campus Box #13.

Chemistry and Biochemistry Research Groups

Sign-up Sheet: Please sign below after talking to _____ concerning your research. The student must obtain the signatures of all faculty members before being allowed to join a particular group in the Chemistry Department. The signature of the current department chair should be the last one obtained by the student.

PROFESSOR'S NAME (office #)		DATE	
J. Bann (403)	_____	_____	Bio-Chem
M. Beck (410A)	_____	_____	Bio-Chem
D. H. Burns (311A)	_____	_____	Organic
D. M. Eichhorn (214C)	_____	_____	Inorganic
D. S. English (317A)	_____	_____	P-Chem
M. Gong (330A)	_____	_____	Analytical
W. C. Groutas (311B)	_____	_____	Organic
K. Mitchell-Koch (308A)	_____	_____	P-Chem
C. Pugh (107-JA)	_____	_____	Organic/Polymer
A. Shvartsburg	_____	_____	Analytical
J. Wang (214B)	_____	_____	Inorganic
K. Wimalasena (401)	_____	_____	Bio-Chem
H. Wu (304)	_____	_____	Organic/Bio-Chem

STUDENT'S SELECTION OF RESEARCH ADVISOR

Please be aware that your selection of an advisor and your assignment to that research group will not be official until this form is completed and submitted. Please be sure to complete this form before the end of your first semester in the program.

Professor's Name: _____

Student's Signature: _____

Professor's signature indicating acceptance of this student into his/her research group:



Department of Chemistry and Biochemistry

Application for the Non-Thesis Master of Science Degree

Name of Applicant _____ Date _____

The student named above has completed all of the requirements for a Ph.D. in Chemistry except for the preparation and defense of the dissertation and therefore meets the qualifications to receive a non-thesis Master of Science Degree in Chemistry. The completed requirements are as follows:

Dates of Satisfactory Completion

Pass five (5) cumulative exams	_____
Pass eight (8) graduate-level courses in Chemistry	_____
Defend creative research proposal	_____
Present departmental research seminar	_____

_____ Applicant	_____ Date
_____ Ph.D. Committee Chair	_____ Date
_____ Graduate Coordinator	_____ Date
_____ Department Chair	_____ Date

Please consult with your research advisor(s) before returning this form to determine whether you will be a GTA or GRA for the coming semester.

Please indicate anticipated courses and teaching preferences and return NLT Monday, July 12th, 2021. Graduate courses you expect to take:

____ 700 Seminar
 ____ 701 Colloquium
 ____ 719 Modern Synthetic Methods
 ____ 809Y Neurochemistry

Indicate in order of preference (1-high.....6-low) the laboratories you would like to teach:

____ 103 ____ 211 ____ 212 ____ 523 ____ 531 ____ 532

Please remember that we will try and work with your schedule as closely as we can, BUT THE NEEDS OF THE DEPARTMENT TAKE PRIORITY.

Mark out any UNAVAILABLE times for teaching:

	M	T	W	T	F
8:00					
8:30					
9:00					
9:30					
10:00					
10:30					
11:00					
11:30					
12:00					
12:30					
1:00					
1:30					
2:00					
2:30					
3:00					
3:30					
4:00					
4:30					
5:00					



WICHITA STATE
UNIVERSITY

FAIRMOUNT COLLEGE OF
LIBERAL ARTS AND SCIENCES

Department of Chemistry
and Biochemistry

MEMORANDUM

TO: Graduate Affairs Committee

FROM:

DATE:

RE: Department Seminar Presentation

This is to certify that _____ has successfully presented, to the Chemistry Department, a department seminar entitled _____ as partial requirement towards a Ph.D. degree in Chemistry.

Committee Member	Signature
Prof.	
Prof.	
Prof.	
Prof.	
Prof.	

Cc: Student File
Student
Graduate School