

Graduate Student Handbook

2022-2023

Department of Chemistry and Biochemistry

Department Chair – John Wood

Graduate Affairs Committee:

Michael A. Trakselis – Director of Graduate Affairs

Darrin J. Bellert – Director of Graduate Recruiting

Kevin L. Shuford

Patrick J. Farmer

Bryan F. Shaw

Touradj Solouki

Daniel Romo

Graduate Program Coordinator (GPC) – Emily Jessup

CONTENTS

I.	Objectives of the Program	3
II.	Entrance Requirements	3
III.	Programs of Study.....	4
A.	MASTER OF SCIENCE (NON-THESIS).....	4
B.	MASTER OF SCIENCE (THESIS).....	4
C.	DOCTOR OF PHILOSOPHY	4
IV.	Course Requirements	5
A.	Courses	5
B.	Performance standard.....	6
C.	Transfer of credit for courses taken at other institutions.....	6
V.	Research Group Selection.....	7
VI.	Examination Requirements.....	7
A.	Placement and Qualification	7
B.	Seminars/Oral Exams	7
1.	Second-year Pre-Candidacy Exam.....	7
2.	Candidacy Exam	8
C.	Annual Meetings with the Dissertation Committee	9
VII.	Teaching Requirements	9
VIII.	Thesis or Dissertation Requirements.....	9
A.	Manuscript requirement (Ph.D. degree only).....	10
B.	Thesis or Dissertation defense.....	10
IX.	Departmental Clearance	10

REQUIREMENTS FOR THE DEGREES OF MASTER OF SCIENCE AND DOCTOR OF PHILOSOPHY IN CHEMISTRY AND BIOCHEMISTRY

This document lists supplemental departmental regulations for the M.S. and Ph.D. Degrees in Chemistry and Biochemistry. Most details on the Graduate School regulations may be found in the Bulletin of the Graduate School.

I. Objectives of the Program

The Ph.D. is the highest degree in the fields of chemistry and biochemistry. The decision to pursue this degree should be based on a high aptitude for the subject and a determination to function as a professional in the field. The preparation for this degree involves significant coursework and research designed to provide both an in-depth understanding of one area of chemistry (e.g., analytical, biochemistry, inorganic, organic or physical) as well as exposure at an advanced level to types of chemistry outside the area of specialization. Ph.D. students are required to present seminars to develop those research and presentation skills and have a demonstrated familiarity with the scientific literature in their specializations. Our goals are to develop students into independent thinkers, efficient problem solvers, and outstanding scientists that will prepare them for productive careers in the chemical and biological areas as well as contribute as responsible and informed members of society.

The Ph.D. degree is essentially a license to practice independent research and/or to teach at the university level. Once a student has completed their graduate degree(s), they should possess an academic background adequate to enable the graduate to conduct research and teach courses in chemistry and/or biochemistry.

II. Entrance Requirements

A. All students entering for M.S. or Ph.D. degrees should have a bachelor's degree equivalent to a B.S. degree in chemistry or biochemistry. Admission of students holding related science degrees will be considered on a case-by-case basis.

B. Potential Students are evaluated using a wholistic committee review process assessing performance in past courses, relevant research experiences, personal statement, and letters of reference.

III. Programs of Study

A. MASTER OF SCIENCE (NON-THESIS)

The minimum semester-hour requirement for the M.S. non-thesis degree is thirty semester hours.

	<u>30 sem. hrs.</u>
Lecture course work in the major area	9
Additional lecture course work outside the major area	6
CHE 5260: Scientific Communication	2
CHE 5101: Responsible Conduct of Research	1
Additional lecture and/or research course work (<i>i.e.</i> 5V98)	11
Colloquium (CHE 5050) – Registered every Fall/Spr semester	0
Pre-candidacy Seminar (CHE 5150)	1

Note: Students are not directly admitted into the Non-Thesis MS program. The maximum time limit for completion of the MS degree is five years. A typical time frame required for completion of M.S. is 2-3 years.

B. MASTER OF SCIENCE (THESIS)

The minimum semester-hour requirement for the M.S. degree is thirty semester hours including six semester hours of CHE 5V99.

	<u>30 sem. hrs.</u>
Lecture course work in the major area	6
Additional lecture course work outside the major area	3
CHE 5260: Scientific Communication	2
CHE 5101: Responsible Conduct of Research	1
Additional lecture and/or research course work as determined by the thesis committee (<i>i.e.</i> 5V98)	10
Colloquium (CHE 5050) – Registered every Fall/Spr semester	0
Pre-candidacy Seminar (CHE 5150)	1
Defense Seminar (CHE 5150)	1
Thesis (CHE 5V99)	6

Note: Students are not directly admitted into the Non-Thesis MS program. The maximum time limit for completion of the MS degree is five years. A typical time frame required for completion of M.S. is 2-3 years.

C. DOCTOR OF PHILOSOPHY

The minimum semester-hour requirement for the Ph. D. degree is seventy-eight semester hours. Note: It is not necessary that students with the B.A. or B.S. degree obtain an M.S. degree in chemistry before pursuing a doctorate degree.

	<u>78 sem. hrs.</u>
Lecture course work in the major area	9
Additional lecture course work outside the major area	6
CHE 5260: Scientific Communication	2
CHE 5101: Responsible Conduct of Research	1
Additional lecture and/or research course work as determined by the dissertation committee (<i>i.e.</i> 5V98)	45
Colloquium (CHE 5050) – Registered every Fall/Spr semester	0
Pre-candidacy Seminar (CHE 5150)	1
Candidacy Seminar (CHE 5150)	1
Defense seminar (CHE 5150)	1
Dissertation (CHE 6V99)	12

The maximum time limit for completion of the Ph.D. degree is eight years from the time the student first matriculates into the doctoral program. A typical time frame required for completion of Ph.D. degrees is 4-6 years.

IV. Course Requirements

Students will be required to complete 18 credit hours of coursework, including a minimum of 9 credit hours in the chosen area of specialization, a one-hour “Research Ethics” course (CHE 5101) and a two-hour “Scientific Communication” course (CHE 5260). CHEM 5101 and 5260 should be completed during their first year of graduate study and are required for all graduate students. The remaining 6 hours of coursework may be taken in any area, and students will have the option of completing one course in another department (with Director of Graduate Affairs approval). [Note: The requirement for a minor field of study stated in the Bulletin of the Graduate School does not apply to the graduate degrees in chemistry and biochemistry.]

Each student is expected to register and attend Departmental and Divisional Colloquium by registering for CHE 5050 every Fall and Spring semester. Attendance is required (*i.e.*, be there unless illness, personal or family crisis, conflicting professional meeting or Providence hinders attendance). Students should inform the seminar coordinators when they cannot attend seminars for whatever reason. Seminar attendance will be taken, and a grade of Credit / No Credit will be given based on Baylor 75% attendance percentage policy. Only those students receiving Credit for CHE 5050 will be eligible for any and all graduate student TA or research awards in that year. Each division also reserves the right to include appropriate content from these seminars on oral examinations.

A. Courses

(Note: course offerings are subject to change, and any courses in the appropriate divisions can be used to meet the general coursework requirements.)

	Analytical	Biochemistry	Inorganic	Organic	Physical
CHE	5310	5341	5301	4334	5320
CHE	5312	5345	5302	5331	5322
CHE	5314	5346	5304	5335	5323
CHE	5315	5347	5305	5336	5325
CHE	5316	5348	5306		5326
CHE	5345	5306	5323		5347

Analytical

CHE 5310 (Advanced Chemical Instrumentation)
CHE 5312 (Advanced X-omics Mass Spectrometry)
CHE 5314 (Separation Science)
CHE 5315 (Electroanalytical Chemistry)
CHE 5316 (Analytical Spectroscopy)
CHE 531X (where X is any number)
CHE 5345 (Selected Topics in Bioanalytical Chemistry)

Biochemistry

CHE 5341 (Biopolymers)
CHE 5345 (Selected Topics in Bioanalytical Chemistry)
CHE 5346 (Chemical Biology)
CHE 5347 (Physical Biochemistry)
CHE 5348 (Enzymology)
CHE 534X (where X is any number)
CHE 5306 (Bioinorganic Chemistry)

Inorganic

CHE 5301 (Chemistry of the Elements)
CHE 5302 (Symmetry and Group Theory in Chemistry)
CHE 5304 (Special Topics in Inorganic Chemistry)
CHE 5305 (Organometallic Chemistry and Homogenous Catalysis)
CHE 5306 (Bioinorganic Chemistry)
CHE 530X (where X is any number)
CHE 5323 (Structural Studies by X-ray Crystallography)

Organic

CHE 4334 (Organic Spectroscopy)
CHE 5331 (Stereochemistry)
CHE 5335 (Physical Organic Chemistry)
CHE 5336 (Advanced Synthesis and Natural Products)
CHE 533X (where X is any number)

Physical

CHE 5320 (Thermodynamics and Statistical Thermodynamics)
CHE 5322 (Chemical Kinetics and Mechanisms)
CHE 5323 (Structural Studies by X-ray Crystallography)
CHE 5325 (Quantum Chemistry)
CHE 5326 (Lasers and Molecular Spectroscopy)
CHE 532X (where X is any number)
CHE 5347 (Physical Biochemistry)

Courses outside the Major Field

Appropriate courses from other Departments may be taken upon approval of the Director of Graduate Affairs and the student's advisor. Relevant graduate courses in the departments of Anthropology, Psychology and Neuroscience, Computer Science, Geology, Statistics, Biology, Environmental Science (ENV), Human Health, Performance, and Recreation (HHPR), Physics, Departments with the School of Engineering, or other departments may be highly relevant to individual student's program of study. A student should get prior approval before registering for a course outside of the Chemistry and Biochemistry Department. Only one outside course (3 cr) may count towards a student's 18 credit course requirement.

B. Performance standard

A minimum grade of "B-" is required to satisfy any graduate course requirement. Students must also maintain a minimum overall graduate lecture course only GPA of 3.0. Falling below the minimum lecture course GPA will result in departmental probation.

IMPORTANT: Graduate school policy states that failure to maintain a minimum overall GPA of 3.0 results in immediate probationary status. Students on probation are ineligible for stipend support and tuition waivers.

Students must attain the minimum overall course GPA of 3.0 by the end of their subsequent semester to be removed from probationary status. Failure to maintain the minimum GPA for two consecutive semesters will result in expulsion from the graduate program.

C. Transfer of credit for courses taken at other institutions

Consult the Bulletin of the Graduate School for regulations concerning transfer of graduate course work from another institution. If a student has shown proficiency (a minimum grade of "B") in the subject matter of core courses taken at another accredited institution and the course content is essentially the same, a petition may be made to the appropriate divisions to receive credit and/or waive the corresponding requirements. The petition, along with any necessary documentation (transcript, catalog description, course syllabus), will be referred to the faculty in the respective division(s)

for consideration of course transfer. The decision of the division(s) will then be communicated to the student in writing by the GPDs (Graduate Program Directors) in Chemistry and Biochemistry.

Important Note: courses from other institutions that are graded on a pass/fail basis are not transferable to Baylor University in accordance with the Graduate School policy.

V. Research Group Selection

In order for a student to have the maximum benefit in the use of time and in the planning of a program of study, a major professor should be chosen as soon as is practical. Beginning students will do brief (~ 3-4 week) rotations through at least three research groups of their choice, pending approval of that research group's professor. This will roughly coincide with the months of Sept, Oct, and Nov. Students are expected to spend at least 10 hours per week in the lab performing research appropriate to that lab. By the last day of regular classes in the Fall semester, each student will submit a ranked list of their top three group choices to the GPDs. The GPDs in consultation with the graduate faculty will match students to a group based on student preferences, professor approval, and funding considerations.

Beyond the second semester of residence, a student must be an active member of a research group to remain in the graduate program. Research grades (CHE 5V98) for the first semester will be assigned by the GPD. After a student joins a research group, research grades (CHE 5V98) will be assigned each semester by the student's research advisor(s). Failure to make significant PhD thesis research progress, severe personal conflicts, or unprofessional conduct may result in the advisor removing that student from their group. Students will then have one semester to be accepted into another group or leave the Graduate Program. In extreme situations, the Graduate School has a policy on Student Professional Conduct and guidelines for reporting such behavior <https://www.baylor.edu/graduate/index.php?id=969446>.

Students and Faculty advisors are expected to read, discuss, and acknowledge the Graduate Advisor/Advisee Agreement upon joining a laboratory as directed by the Graduate School.

VI. Examination Requirements

A. Placement and Qualification

All entering graduate students are required to take a qualifying exam in each of five areas (*i.e.*, analytical, biochemistry, inorganic, physical, and organic). Those students that have not taken an applicable undergraduate course in either inorganic chemistry or biochemistry may be exempt from taking that qualifying exam. Students must ultimately pass a qualifying exam OR complete a formal approved undergraduate (*i.e.*, 4000 level) or graduate course (*i.e.*, 5000 level) with a grade of **"B" or better** in each of three areas, including the chosen area of specialization. This requirement must be met by the end of the student's second semester of residency in the program. Qualifying exams will typically be offered in August, January, and April. Students that fail to meet this requirement will be terminated from the graduate program, without a degree, at the end of their first year of study. Note: preapproved "two-area courses" (*e.g.*, Bioanalytical, Biophysical, Bioinorganic, etc.) are allowed to count toward either area as indicated in the Table (Section III.A) above but not both areas. Neither courses taken as an undergraduate nor transfer courses will count toward passing the qualifying exams. Petitions to take courses outside of the Department must be made to the Director of Graduate Affairs (in consultation with the faculty advisor) prior to registering.

B. Seminars/Oral Exams

1. Second-year Pre-Candidacy Exam – All students will be required to give a departmental seminar (registered as 1 cr CHE 5150) focused on their written research project proposal **before the end of May** of the student's second year. The date and time of the exam is to be arranged by the student based on faculty and room availability. One week prior to the oral presentation, the student shall submit a written proposal to the committee. The format of the proposal will follow either the current NIH R01 style or the NSF style depending on the advisor's preference. Students should closely follow all the current page limitations, fonts, margins and other specifics as defined by either funding agency. The NIH R01

preparation instructions are contained in Form SF424 (R&R) at <http://grants.nih.gov>. The NSF Grant Proposal guide can be found at <https://www.nsf.gov/publications>. The written proposal will typically be an extension of the research proposal prepared for CHE 5260 Scientific Communication during the student's first year of graduate study.

The oral part of the pre-candidacy exam will consist of an approximately 45-minute public presentation, followed by a closed-door oral exam, approximately two hours total duration. The committee will consist of the student's advisor, two other research faculty from the same division, and one research faculty from another division. The specific members of the committee are chosen by the student in close consultation with their advisor and must be members of the Graduate Faculty. The content of this presentation should mimic the written proposal and include: (1) relevant literature that frames the background, novelty, and significance of the research project; (2) specific aims (goals or objectives) of the research project; (3) experimental results to date; and (4) plans for future work.

After the departmental presentation, students will field questions from the audience first and then from faculty afterwards during the closed-door portion of the exam. Based on a simple majority opinion, a Pass/Fail grade will be assigned by the faculty members present from the student's committee. In the event of a tie, the student will receive a passing grade. Seminars for all students that begin the Ph.D. program in August of a given calendar year will be scheduled during the month of May in their 2nd year (fourth full semester) of residency. Students who enter the program in January will be expected to participate as if they had entered the previous fall semester, *i.e.*, take the exam at the end of their third full semester of residency. Students that do not pass this exam will be transitioned to a terminal, non-thesis M.S. track and should file for graduation in August of the same calendar year.

Those students that decide to change degree tracks to the non-thesis M.S. prior to the second-year exam are only required to complete a public departmental seminar on their independent research to fulfill the CHE 5150 requirement (1 cr). A Pass/Fail grade will be assigned by their faculty mentor.

2. Third Year Candidacy Exam - Ph.D. students will be required to appear before their Ph.D. committee and present their research progress no later than the **end of June** (although May is easier to schedule the committee) of the student's third year of residency in the program (registered for 1 cr CHE 5150). At this stage, the student should ideally have submitted one (or more) paper(s) to a peer-reviewed journal(s) as an author. Written evidence of progress towards publication is required. The realistic expectation is that at the time of the exam, a paper is published, *in press*, accepted, or submitted. Students that have already published a peer-reviewed journal article(s) that will constitute one or more chapters of their dissertation may simply provide committee members with a copy. Students that have not yet published a paper must provide committee members with a completed draft manuscript that specifically follows the format specified by their target journal for submission. This draft manuscript must be provided at least one week prior to the examination date.

The student should be able to demonstrate expertise in her/his chosen field of study and have a clear idea of how her/his research project will be expanded to fill out a dissertation. This consists of an approximately 45-minute, "departmental" presentation, similar to the second-year exam, but with an emphasis on what has been accomplished since the second-year exam and how close to publication the results are. The presentation should also outline the student's future plans towards the Ph.D. dissertation. The presentation will be followed by a closed-door oral exam, with a total duration of approximately two hours.

The examination committee shall consist of the same graduate faculty that attended the second-year exam, as well as an "outside" committee member from another department that is also on the graduate faculty. The "outside" committee member is chosen by the student in consultation with her/his advisor, and the date/time of the exam is arranged by the student in consultation with committee members. An outside university graduate faculty member may be included in addition to (but not in place of) other normal committee members.

Students who feel their research progress has been exemplary in their first two years may request that the pre-candidacy and candidacy exams be combined into a single exam taken in May at the end of the student's second year. The combined exam would include all elements of the separate exams in the 45-minute presentation, and the written research proposal should be of sufficient scope to justify a Ph.D. degree.

The student's grade will be assigned by the student's dissertation committee and will be based on a simple majority opinion. In the event of a tie, the student will receive a passing grade. Students that do not pass this exam by the end of their third year of residency in the program will be transitioned to a terminal M.S. degree track and should file for graduation in August of the same calendar year.

Dissertation hours (CHE 6V99) may not be taken until candidacy has been established. After completing the candidacy exam and 45 hours of CHE 5V98, students may register for dissertation (6V99) at their advisor's discretion. Grades for 6V99 should be given by the advisor: 1) "CR" – Credit, indicates the student made satisfactory progress 2) "NC" – No Credit, indicates the student did not make satisfactory progress or 3) "I" Incomplete, student has not completed all assignments for the semester. "I" grades must be completed before certification to graduate.

Graduate students should not provide any food or beverages for the defense. Faculty will not request that students provide refreshments. Refreshments can be provided by the faculty or through the department.

C. Annual Meetings with the Dissertation Committee

Once students have been admitted to Ph.D. candidacy, they will be required to schedule annual meetings with the departmental portion of their Ph.D. committee to keep them apprised of research progress and any major changes that may need to be made to the envisioned content of their dissertation. Typically, a one-page summary of accomplishments, future goals, and timelines will be submitted to the committee at which point the student or any member of the committee can request the scheduling of an in-person meeting.

It is the responsibility of the student to obtain all forms (both departmental and from the Graduate School) and signatures necessary for completion of the exams. These are to be turned into the GPC upon completion. Note: Masters and Ph.D. Thesis defenses need to be announced and approved by the Graduate School 10 days prior to the exam. A complete list of requirements and deadlines are kept by the Graduate School. Make sure to check "Completing your Degree" at <https://www.baylor.edu/graduate/>

VII. Teaching Requirements

Every full-time graduate student should expect to teach at least two semesters while in residence at Baylor, regardless of the method of support. Satisfactory performance of assigned teaching duties is expected of all teaching assistants (TAs). General TA duties may include: supervising undergraduate students, preparing solutions and/or experiments affiliated with one or more laboratory courses, grading of laboratory reports, maintaining laboratory cleanliness, and any other duties assigned by the instructor in charge. Student, peer, and/or supervisor evaluations may be used to evaluate TA performance. Being late or absent from your TA assignment and failing to maintain laboratory safety standards (*e.g.*, not following and enforcing dress code or goggles-on policies) are considered serious breaches of responsibility. Failure to meet TA responsibilities will result in a written reprimand in the graduate student's file. A second reprimand may potentially result in partial loss of stipend and, at the discretion of the Graduate Affairs Committee, possible dismissal from the graduate program. Full-time graduate students may not be employed outside of the Department of Chemistry & Biochemistry.

IMPORTANT: Progress in research is a critical part of any graduate program. Departmental teaching assistantships will not be extended to Ph.D. candidates beyond twelve regular semesters (6 years) of residence or to M.S. candidates beyond a third year of residence, except under extenuating circumstances. Any graduate student desiring to be considered for a teaching assistantship beyond this period may request one additional semester of TA support by submitting in writing a petition to this effect and a letter of support from their advisor to the Graduate Committee.

VIII. Thesis or Dissertation Requirements

Instructions for the preparation and submission of a thesis or dissertation are given in the Bulletin of the Graduate School, the ACS Style Guide for Authors being the primary source. When this Guide does not address particulars in a thesis or

dissertation, then Turabian and/or the Graduate School's printed guidelines are to be followed. The student is strongly advised to check with the Graduate office on matters of formatting the thesis or dissertation in advance.

A. Manuscript requirement (Ph.D. degree only)

Prior to the scheduling of a student's dissertation defense, the student will have served as co-author of a **minimum of two manuscripts that have been accepted for publication**. The manuscripts will be in acceptable per reviewed journals and will be substantially based upon the student's dissertation research results (both of these criteria will be judged solely by the student's research mentor). Students engaged in proprietary research where patenting considerations, *etc.*, restrict publication of the work must present the committee with patent applications or similar documentations. When multiple authors are included in publications, it should be made clear the specific contributions of the student directly in the thesis document. Ph.D. Thesis defenses need to be announced and approved by the Graduate School 10 days prior to the exam.

Students that make a 'significant' intellectual contribution to a manuscript should be included as an author. 'Significant' can mean different things from conception or design, acquisition of data, or interpretation of results. Less significant contributions can be noted in the "Acknowledgement" section.

B. Thesis or Dissertation defense

After completion of each of the requirements described above as well as all other requirements set forth by the research advisor, the Department of Chemistry & Biochemistry, and the Graduate School, the student will work with their research advisor to prepare an acceptable thesis or dissertation. Once the research advisor is satisfied with the quality of the thesis or dissertation, the student will work with their candidacy committee to schedule the defense. A complete printed copy (and pdf copy) of the thesis or dissertation will be distributed to the student's committee at least seven days prior to the defense. The date, time, and location of the public presentation (comprised of a 50-minute formal seminar followed by Q&A, and registered for in advance as CHE 5150) will be formally announced 10 working days prior to the defense and approved by the Graduate School. After the public presentation, a closed defense will be held before the student's committee and other interested members of the graduate faculty. Successful completion of this defense will be contingent upon the student making revisions to the thesis or dissertation as directed and voted on by the committee. After successful completion of the thesis, it is the student's responsibility to coordinate ordering with the Graduate Program Coordinator three final bound hardcopies (one each for student, PI, and for display in the departmental conference room).

It is the responsibility of the student to complete all of the required materials set forth by the Graduate School and meet the appropriate deadlines for graduation in a semester. You can find all of this updated information at <https://www.baylor.edu/graduate/index.php?id=958619>.

IX. Departmental Clearance

Prior to graduation, all candidates for the M.S. or Doctor of Philosophy degree must comply with Chemistry Department regulations concerning laboratory checkout. The checkout procedure includes a satisfactory inspection of the candidate's work area by the Chemistry and Biochemistry Department Safety Officer and by an Environmental Health and Safety representative, completion of the Chemistry and Biochemistry Department Clearance Form, and return of any keys or Departmental or laboratory resources. All laboratory notebooks, generated electronic data or images, and any scientific products of the work will remain at Baylor under the care of the PhD advisor.

Entrance Exam Record

Name: _____

Entered Program: _____

Results

	pass/fail			
	August	January	April	or: Course Taken
Analytical				
Biochemistry				
Inorganic				
Organic				
Physical				

Research Group Selection

It is important that new graduate students develop some familiarity with the research of at least several faculty working in areas of possible interest to the student to make an informed decision on joining a lab. The goals of the research, the techniques to be learned and the dynamics of interacting with both the advisor and the research group are all important considerations. To facilitate this level of familiarity, new graduate students are required to set up brief (~ 3-4 week) rotations in the laboratory of at least three research groups. These rotations consist of spending enough time with a research group that you gain some knowledge of the people, research techniques, and facilities associated with each group. Working in the lab alongside the professor or a graduate student is not required, though encouraged, with the faculty member's approval. Although a student may have a good idea of what division of chemistry (organic, analytical, physical, biochemistry, and inorganic) he/she wants to study, students may choose to investigate research in other divisions which are perhaps less familiar to them. Multiple discussions with potential mentors may be necessary for the student to make the most informed decision regarding group selection. Students should make these arrangements by contacting the faculty members directly.

Please secure the signature of each faculty member with which you did a laboratory rotation. Rank order your top three choices in order and turn this into the Director of Graduate Recruiting no later than the last day of classes of the fall semester. The Director in consultation with the graduate faculty will match graduate students to labs as outlined in the Grad Requirements document.

Graduate Student Name: _____

I did rotations in the labs of _____ (name)

_____ (signature)

Top three choices of research group (in order):

1) _____

2) _____

3) _____

Matched Research Group: _____ Signature of Research Advisor: _____

Signature of the Graduate Program Director: _____ Date: _____

TEACHING Assistant's Work Evaluation

Department of Chemistry, Baylor University

TA's Name: _____ Course Assignment: _____ Semester: _____

Please evaluate the work of your graduate assistant in each of the areas below. Check the appropriate box and offer comments. Return this to GPD by the end of the semester.

Work Activity	Poor	Acceptable	Good	Very Good	Excellent	Comments
Preparation before & after lab						
Reliability						
Working with students						
Grading duties						
Compliance with all safety rules						
Attitude						
Attendance at TA meetings						
Professional ethics						

Additional Comments:

OVERALL RATING:

Poor: _____ Acceptable: _____ Good: _____ Very Good: _____ Excellent: _____

Signature of professor/staff member: _____ Date: _____

Pre-Candidacy Oral Exam Evaluation

Student _____ Date _____

Rate the following areas on a scale of 1 to 5, with 5 being the highest rating and 1 being the lowest. Make any specific comments in the spaces to the right. **Note:** a score of 3 is usual and respectable and corresponds to an "average" rating. Please use scores of 4 or 5 only for unusually good and exceptional performances, respectively, and leave comments that support such scores.

Note: All of the ratings below are necessary. These ratings are used for student feedback as well as program assessment purposes.

	Relative Rating					Low	Comments
	High	5	4	3	2		
Background knowledge in field							
Grasp of scientific literature							
Preparation of Research Proposal							
Oral Presentation							
Grasp of project methodology							
Overall							

Faculty Signature: _____ Date _____

Circle: **PASS** **FAIL**

Candidacy Oral Exam Evaluation: progress toward publication

Student _____ Date _____

Rate the following areas on a scale of 1 to 5, with 5 being the highest rating and 1 being the lowest. Make any specific comments in the spaces to the right. **Note:** a score of 3 is usual and respectable and corresponds to an "average" rating. Please use scores of 4 or 5 only for unusually good and exceptional performances, respectively, and leave comments that support such scores.

Note: All of the ratings below are necessary. These ratings are used for student feedback as well as program assessment purposes.

	Relative Rating					Low	Comments
	High	5	4	3	2		
Background knowledge in field							
Grasp of scientific literature							
Oral Presentation							
Grasp of project methodology							
Progress towards publication w/reference							
Overall							

Faculty Signature: _____

Date _____

Circle: **PASS** **FAIL**

M.S. Thesis Defense Evaluation - Faculty

Speaker _____ Date _____

Rate the following areas on a scale of 1 to 5, with 5 being the highest rating and 1 being the lowest. Make any specific comments in the spaces to the right. **Note:** a score of 3 is usual and respectable and corresponds to an "average" rating. Please use scores of 4 or 5 only for unusually good and exceptional performances, respectively, and leave comments that support such scores.

Note: All of the ratings below are necessary. These ratings are used for student feedback as well as program assessment purposes.

	Relative Rating					Low	Comments
	High	5	4	3	2		
Amount of research completed							
Quality of research completed							
Grasp of research methodology							
Quality of written M.S Thesis							
Quality of Oral Presentation							
Student's ability to function at the M.S. level							
Overall							

Faculty Signature: _____

Date _____

Circle: **PASS** **FAIL**

Ph.D. Defense Evaluation - Faculty

Speaker _____ Date _____

Rate the following areas on a scale of 1 to 5, with 5 being the highest rating and 1 being the lowest. Make any specific comments in the spaces to the right. **Note:** a score of 3 is usual and respectable and corresponds to an "average" rating. Please use scores of 4 or 5 only for unusually good and exceptional performances, respectively, and leave comments that support such scores.

Note: All of the ratings below are necessary. These ratings are used for student feedback as well as program assessment purposes.

	Relative Rating					Low	Comments
	High	5	4	3	2		
Amount of research completed							
Quality of research completed							
Grasp of research methodology							
Quality of written PhD Thesis							
Quality of Oral Presentation							
Student's ability to function at the PhD level							
Overall							

Faculty Signature: _____

Date _____

Circle: **PASS** **FAIL**