**Please read the manual and submit the signed cover page to the Graduate Secretary**

**Graduate Student Policies and Procedures Manual**

**Department of Chemistry and Biochemistry**

**Florida International University**

The purpose of this manual is to bring together pertinent information essential for graduate students in the Department of Chemistry and Biochemistry at Florida International University. It is intended to supplement and help clarify the guidelines and requirements for graduate study at the University and the specific policies and procedures within the Department. In no way is this manual intended to override or substitute any of required policies and procedures established by the University Graduate School. It is the student’s responsibility to understand and follow the University and Departmental policies and procedures. The student is responsible for making certain all requirements have been met within the established deadlines. Each student must submit the signed statement to the graduate program secretary for inclusion in the student’s file.

I have received and read the Graduate Policies and Procedures Manual.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Name Signature Date

Revised January 28, 2021

**Graduate Student Policies and Procedures Manual**

**Department of Chemistry and Biochemistry**

**Florida International University**

**Effective August 20, 2004**

**Revised August 6, 2007**

**Revised August 7, 2010**

**Revised August 2, 2011**

**Revised July 19, 2012**

**Revised August 6, 2018**

**Revised August 8, 2019**

**Revised**

**Table of Content**

[**1.** **Chemistry Graduate Admission Requirements and Procedures** 5](#_Toc15894781)

[1.1 Graduate Admission Requirements 5](#_Toc15894782)

[1.2 Application Procedures 6](#_Toc15894783)

[1.3 Program Requirements 7](#_Toc15894784)

[1.4 Meeting the faculty and choosing a research advisor 7](#_Toc15894785)

[**2.** **The Master of Science in Chemistry Program** 7](#_Toc15894786)

[2.1 Specific Requirements 7](#_Toc15894787)

[2.2 M.S. Thesis Committee 9](#_Toc15894788)

[2.3 Thesis Committee Appointment (M-1) 10](#_Toc15894789)

[2.4 Research Seminar (M-2) 10](#_Toc15894790)

[2.5 Thesis 11](#_Toc15894791)

[2.6 Request for Thesis Defense Form (M-3) 11](#_Toc15894792)

[2.7 Final Approval of the Thesis 11](#_Toc15894793)

[2.8 Active Status and Time Limitations 11](#_Toc15894794)

[**3.** **Doctor of Philosophy (Ph. D.) in Chemistry Program** 12](#_Toc15894795)

[3.1 Specific Requirements 12](#_Toc15894796)

[3.2 Dissertation Committee 15](#_Toc15894797)

[3.3 Dissertation Committee Appointment (D-1) 16](#_Toc15894798)

[3.4 Admission to Candidacy (D-2) 17](#_Toc15894799)

[3.5 Research seminar (D-3) 17](#_Toc15894800)

[3.6 Annual Review 17](#_Toc15894801)

[3.7 Preliminary approval of dissertation and request for oral defense (D-5) 18](#_Toc15894802)

[3.8 Final Approval of Dissertation 18](#_Toc15894803)

[3.9 Active Status and Time Limitations 18](#_Toc15894804)

[**4.** **Ph. D. in Chemistry with a Forensic Track Program** 18](#_Toc15894805)

[4.1 Admission 19](#_Toc15894806)

[4.2 Degree Requirements 19](#_Toc15894807)

[**5.** **Environmental Chemistry Track Ph.D.** 21](#_Toc15894808)

[5.1 Degree Requirements 21](#_Toc15894809)

[**6.** **Radiochemistry Track Ph.D.** 23](#_Toc15894810)

[6.1 Degree Requirements 23](#_Toc15894811)

[**7.** **Education Track Ph.D.** 25](#_Toc15894812)

[7.1 Degree Requirements 25](#_Toc15894813)

[**8.** **General Information** 27](#_Toc15894814)

[8.1 Financial assistance 27](#_Toc15894815)

[8.2 Guidelines for graduate assistantships (GAs) 28](#_Toc15894816)

[8.3 Duties of teaching assistants (TAs) 28](#_Toc15894817)

[8.4 Responsibility of supervising faculty 28](#_Toc15894818)

[8.5 Evaluation of TAs 29](#_Toc15894819)

[8.6 TA/Faculty grievances 29](#_Toc15894820)

[8.7 Obtaining Florida Residency 29](#_Toc15894821)

[8.8 Withdrawal/leaves of absence/re-admittance 30](#_Toc15894822)

[8.9 Research and Patents 30](#_Toc15894823)

[8.10 Forgiveness policy 30](#_Toc15894824)

[8.11 Transfer of graduate credits 30](#_Toc15894825)

[8.12 Rights and responsibilities 31](#_Toc15894826)

[**9.** **Appendix** 33](#_Toc15894827)

[9.1 University Graduate School Forms 33](#_Toc15894828)

# **1. Chemistry Graduate Admission Requirements and Procedures**

## 1.1 Graduate Admission Requirements

A minimum undergraduate grade point average of 3.0/4.0 in chemistry and cognate science is required for admission. Applicants are also required to submit general GRE scores. There is no minimal requirement for the overall GRE score, but applicants with an average percentile rank on the verbal and quantitative parts of the GRE of 40 for the MS Program and 60 for the PhD Program will be preferentially considered. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL or 6.5 overall on the IELTS is required. Students whose undergraduate degree is not equivalent to the American Chemical Society certified B.S. degree in chemistry must make up those deficiencies prior to taking graduate courses. For example, students who have not completed quantum mechanics or instrumental analysis must complete Graduate Physical Chemistry II (CHM 5426) and Graduate Analytical Methods (CHM 5150) with a passing grade of C or better.

The graduate committee of the Department, which consists of seven faculty members, considers applicants’ files and makes admission recommendations. The applicants are ranked by the committee based on their academic credentials, such as undergraduate and graduate (if available) GPA, GRE and TOEFL scores, previous achievements in research, such as scientific publications and presentations, and evaluation of their potential to be successful in the graduate program based on recommendation letters, a personal statement, and academic transcripts. The overall rank of an applicant is determined by the committee from the combination of the aforementioned factors. The top-ranked applicants are recommended for admission in the amount determined by the number of available TA positions in the upcoming fall semester. Admission to the program for a spring or summer semester is possible only on an RA position sponsored by a faculty member, for applicants with external fellowships, or for domestic applicants who do not require financial support and tuition waiver (part-time students). Admission on an RA sponsored by a faculty is possible only if the faculty commits at least three consecutive semesters of RA supported for the admitted student. The Department has a rolling admission policy. Applicants’ files for fall admission are reviewed from the beginning of the spring semester on a regular basis and applicants continue to be recommended for admission until all available positions are filled or until the University deadline for the fall admission expires.

Every student entering the graduate program in chemistry and biochemistry will be required to take two entrance/proficiency examinations covering standard undergraduate-level material in Organic Chemistry, Physical Chemistry (thermodynamics/quantum chemistry), Analytical Chemistry (Instrumental Analysis), Inorganic Chemistry and/or Biochemistry. One pass must be in either organic or physical chemistry; the other is open. The proficiency exams will be administered to incoming graduate students in the week before the fall and spring semesters. If a student fails to receive a pass in a proficiency exam, he or she must show proficiency by completing the appropriate course with a grade of “B” (3.0/4.0) or better. These courses are Graduate Organic Chemistry (CHM 5225), Graduate Physical Chemistry (CHM 5425), Graduate Physical Chemistry II (CHM 5426), Graduate Inorganic Chemistry (CHM 5620), Graduate Analytical Methods (CHM 5150), and Graduate Biological Chemistry (CHM 5305). Students are expected to complete proficiency requirements by the end of their first semester and students who do not receive at least a B are asked to leave the program.

Full-time graduate students generally serve as Teaching Assistants (TAs) in the Department of Chemistry and Biochemistry during their first semester. Ph.D. candidates must serve no less than one year as teaching assistants. This requirement will be waived only when, in the opinion of the Graduate Committee, unusual circumstances justify such action. TAs are awarded on a competitive basis, renewal of an award requires an acceptable research and teaching performance, and may be continued for up to four years for Ph.D. students with acceptable academic progress. Graduate students must maintain a 3.0/4.0 GPA (Only courses required by the graduate program will be used to calculate the GPA, excluding courses related to the proficiency requirements). University policy requires a student maintain a GPA ≥ 3.0 to maintain a TA. If a student’s GPA drops below a 3.0 for one semester he/she will be placed on academic probation and the TA is subject to cancellation. A student who fails to raise their GPA to a 3.0 or higher in two semesters will be dismissed from the program.

## 1.2 Application Procedures

Prospective candidates must submit an application for admission to the graduate program on line ($30) @ http://www.fiu.edu/gradadm. Additional departmental information is available on line @ http://www.fiu.edu/orgs/chemistry. Applicants must also arrange to have official transcripts from all colleges and/or universities attended and official test scores (GRE, plus TOEFL as a foreign student and TSE if a foreign student applying for financial support) sent to the Admissions Office. Transcripts in a language other than English must be accompanied by an official English translation. Three letters of recommendation and a statement of purpose must be submitted with the application materials.

Florida International University has a rolling admissions policy. When the Admissions Office receives an application, application fee, transcripts and GRE, and TOEFL, scores, they are forwarded to the Department of Chemistry and Biochemistry for evaluation. Formal admission to the M.S. and Ph.D. programs and awards of teaching assistantships are granted by the Graduate Program Director in consultation with the Graduate Committee. The Department of Chemistry and Biochemistry can accept students at the beginning of each semester (fall, spring, and summer). For full consideration all the application materials should be received at least 6 months in advance of the desired starting date.

## 1.3 Program Requirements

General Coursework Requirements: The Master and Doctoral graduate programs in Chemistry and Biochemistry require the satisfactory completion of a variety of lecture courses including a minimum number of core courses. Full-time M.S. and Ph.D. students supported on teaching assistantships in general must register for 10 credits in the first semester (except for summer admits who register for 6 credits) and subsequently 9 credits each fall and spring semester and 6 credits during the summers until the candidacy exam has been completed. After candidacy students register for 3 credits of CHM 7980 (Research) and 0 credits of CHM 6935 (Seminar) each semester. The first semester coursework will be determined in consultation with the graduate program director. Full time students taking two proficiency courses their first semester must take one additional graduate course. All other entering students have the option of taking two or three graduate courses the first semester. Once a thesis/dissertation advisor has been chosen, the advisor and the student's committee will advise the student as to which courses should be taken in accordance with the policies established by the department and the university. The following are considered proficiency courses do not meet the core or elective course requirement: Graduate Organic Chemistry (CHM 5225), Graduate Physical Chemistry (CHM 5425), Graduate Physical Chemistry (CHM 5426), Graduate Inorganic Chemistry (CHM 5620), Graduate Analytical Methods (CHM 5150), and Graduate Biological Chemistry (CHM 5305).

1.4 Meeting the faculty and choosing a research advisor

The purpose of this requirement is for the students and faculty members to meet and for the students to learn about the research projects of individual faculty members. New full time graduate students must enroll in CHM 6910L-Graduate Research in Chemistry, if credits are available, during their first semester and submit to the graduate program director the appropriate form (attached). Each new graduate student shall be required to interview with a *minimum* of 6 faculty members. Once the student has received a signature from the interviewed faculty members he or she must obtain an additional form from the graduate program director for final approval and acceptance of the student and research advisor. Final approval and acceptance must be obtained before beginning formal work with the agreed upon research advisor. Each student should submit paperwork for their committees (M-1 or D-1) to the University Graduate School at the beginning of their second or third semesters, respectively.

# **2. The Master of Science in Chemistry Program**

## 2.1 Specific Requirements

2.1.1 A minimum of thirty-two (32) credits of coursework. A grade of "C" or higher must be obtained in all courses and a cumulative GPA of 3.0 or higher must be maintained.

2.1.2 The courses must include at least nine (9) credits of designated core graduate chemistry courses (listed below) in at least two of the five major disciplines of chemistry. Courses not listed below may be counted in one of the five areas only with prior departmental approval.

Analytical Core Courses: CHM 5156 Advanced Chromatography; CHM 6157 Advanced Analytical Chemistry; CHM 5138 Mass Spectrometry; CHM 5165 Chemometrics.

Biochemistry Core Courses: CHM 5506 Physical Biochemistry, CHM 5503 Physical Chemistry of Nucleic Acids; CHM 5325 Physical Chemistry of Proteins.

Inorganic Core Courses: CHM 5440 Kinetics and Catalysis; CHM 5650 Physical Inorganic Chemistry; CHM 5540 Group Theory; CHM 5251 Organometallic Chemistry

Organic Core Courses: CHM 5250 Organic Synthesis; CHM 5236 Spectroscopic Techniques and Structure Elucidation; CHM 5260 Physical Organic Chemistry.

Physical Core Courses: CHM 5490 Physical Spectroscopy; CHM 6430 Advanced Thermodynamics; CHM 6461 Statistical Thermodynamics; CHM 6480 Quantum Mechanics; CHM 5423 Atmospheric Chemistry; CHM 5540 Group Theory; CHM 5586 Computational Chemistry.

2.1.3 The student must complete at least six (6) credits of additional core and/or elective graduate-level chemistry courses (excluding research and seminar). The courses must be approved by the thesis committee in consultation with the graduate program director and follow these guidelines: (1) The courses must be 5000, 6000 or 7000 level chemistry courses (CHM prefixes) or courses from a related department or departments approved by the student’s thesis committee and the graduate program director (up to a maximum of six credits).

2.1.4 Full-time graduate students are required to register for one (1) credit of Graduate Seminar (CHM 6935) or one (1) credit of Chemistry Colloquium (CHM 6936) each fall and spring semester.

2.1.5 Research Seminar - Each full-time student must register for Chemistry Colloquium (CHM 6936) and present a seminar of their proposed research to the department for a letter grade during their second semester of graduate study. The M-2 form (from the University Graduate School) accompanied by a summary (up to five pages) of the proposed thesis research must be submitted to the student’s committee at least one week before the seminar is presented. The student’s committee must attend the seminar and M-2 must be completed, signed and submitted to the University Graduate School (UGS). The instructor of the course (CHM6936), in consulting with the committee members, will assign a grade to the student. The student will receive a grade of Excellent (A), Very Good (B) or Satisfactory (C), Needs Some Improvement (D), or Very Unsatisfactory (F). If the student receives a grade of unsatisfactory or below, he or she will receive an Incomplete for the course. The student must represent the proposal in the following semester. Together with the submission of M-2 form and the research proposal, student must submit a certificate indicating the completion of on-line training on Responsible Conduct of Research (RCR). The on-line training course can be taken at <http://ori.fiu.edu/RCR/rcr_online_training.html>. Students from Department of Chemistry and Biochemistry should complete the “CITI Physical Science Responsible Conduct of Research Course”.

2.1.6 At least eight (8) credits of Thesis Research (CHM 6970) must be completed involving independent thesis research under the direction of a faculty member in the department.

2.1.7 At least two (2) credits of Thesis (CHM 6971) must be taken in the semester in which the M.S. thesis is to be defended.

2.1.8 Submission and satisfactory public defense of an original research thesis as determined by the student’s thesis committee (completion of M-3).

## M.S. Thesis Committee

2.2.1 Full-time students must choose a major professor (research advisor) and appropriate project within the first semester of study (part-time students are expected to choose a research advisor prior to the completion of 9 graduate credits). The M.S. graduate student's thesis committee will consist of three voting members including the major professor from the graduate faculty in the department, a randomly chosen committee member selected by the graduate committee from the departmental graduate faculty, and at least one additional committee member who has expertise in the graduate student’s research area. Additional non-voting committee members may be included on a student’s thesis committee. The major professor will chair the thesis committee. At least one member of the student’s M.S. thesis committee must be tenured in the Department of Chemistry and Biochemistry. Committee members within FIU must have graduate faculty status and may be selected from within or outside of the Department of Chemistry and Biochemistry. Scientists who are not employees of FIU must submit curriculum vitae which will be attached to form M-1 to be submitted to the UGS for approval. A student may not pursue a research project directed by an external supervisor. Committee members may not be relatives or family members of a student. Faculty may not serve on the committee of a student when a conflict of interest exists; this includes personal and/or business relationships.

2.2.2 A detailed course of study should be determined for each student by his/her thesis committee. The course of study must include all courses required by the Department and those considered essential for the student's particular program of study. Formal course requirements should be met at the earliest possible date.

2.2.3 Graduate faculty must meet the following requirements to serve as major professor and chair of a M.S. thesis committee:

* be a tenure-earning or tenured member of the Department of Chemistry and Biochemistry.
* has specialized academic competence in the student’s major field.
* have taught a graduate course in the last three years or had a graduate student who graduated within the last three years.
* have published an article in a peer reviewed journal in the last three years or had research funding during the last three years.
  + 1. To serve as a committee member, the faculty member or external research scientist must have taught a graduate course in the last three years or published an article in a peer-reviewed journal within the last three years. These guidelines may not adequately cover all situations. Therefore, faculty members may make a written appeal to the Graduate Committee. If necessary, an appeal of the decision of the graduate committee can be made to the Department.

2.2.5 Students should play an active role in the selection of their thesis committee members and must arrange to meet formally with their committee at least once each year to insure that each committee member is fully informed of the student's progress.

2.2.6 The thesis committee’s functions are to advise the student in all academic and research matters; formulate a course of study; review progress on the thesis research; administer the defense of the thesis; render final approval of the thesis.

## Thesis Committee Appointment (M-1)

Form M-1 should be completed and submitted to the University Graduate School (UGS) immediately upon formation of a thesis committee (beginning of second semester of study). The composition of the committee must meet Department and University requirements. It may be necessary to change the composition of a thesis committee at some point during a student’s program of study. In such a case, the student must file appropriate forms (M-1r) to the graduate committee and UGS for approval. If a student requests a change of major professor, the student must submit a written request to the Graduate Committee for approval. If the thesis research has changed significantly, a new summary of the thesis research should be submitted with the revised M-2.

## 2.4 Research Seminar (M-2)

See 2.1.5 above

## 2.5 Thesis

A thesis must be prepared and submitted in accordance with the guidelines and deadlines established by the University Graduate School and the College of Arts and Sciences. These guidelines are set forth in the Thesis and Dissertation Preparation Manual available from the Graduate Studies Office or at the Graduate Division website at http://gradschool.fiu.edu/documents/Manual\_Regulations.pdf

## 2.6 Request for Thesis Defense Form (M-3)

The thesis defense is a university requirement. The defense must be scheduled and held to comply with University Graduate School deadlines. The Graduate Division publishes their deadlines for submission on their website http://gradschool.fiu.edu/calendar-deadlines/ The Dean of the College has a zero tolerance policy on the College deadlines. Thus, the student who does not comply with these deadlines may be forced to enroll for another semester to be able to graduate.

A copy of the thesis, certified as complete and provisionally acceptable and one copy of the Thesis Defense Announcement must be submitted with M-3 to the UGS at least THREE (3) weeks before the proposed date of the defense or by the UGS catalog deadline, whichever is earlier. An electronic version of the thesis defense announcement must be sent to [ugs@fiu.edu](mailto:ugs@fiu.edu) and posted. The College of Art and Sciences requests the aforementioned document be submitted to the Dean’s Office ONE (1) week prior to the UGS deadline. The student must submit the thesis to the thesis committee and the graduate program director for approval one week prior to the submission to the College.

## 2.7 Final Approval of the Thesis

Complete Final ETD Approval form must be submitted in accordance with the College of Arts and Sciences and Graduate School deadlines after a final copy of the thesis is approved by the committee.

## 2.8 Active Status and Time Limitations

Active status in good standing entitles students to utilize the University's resources. To maintain active status in the M.S. program, students must register for a minimum of one (1) credit per semester, summer semester included. Lapses in enrollment for two or more consecutive semesters will result in a student being dismissed from the program. All requirements for the M.S. degree, including the successful defense of a thesis, must be completed within six years of first enrollment in the program, inclusive of any leaves of absence or other interruptions of active student status. Students who do not complete their thesis within this time period may apply for an exception to this rule by filing a Request for Exception form to the Dean of the Graduate School.

# **3. Doctor of Philosophy (Ph. D.) in Chemistry Program**

## 3.1 Specific Requirements

3.1.1 A minimum of seventy five (75) credits of course work. A grade of "C" or higher must be obtained in all courses with a cumulative GPA of 3.0 or higher.

3.1.2 Students must complete a minimum of at least nine (9) credits of core chemistry courses (listed below) in at least two of the five major areas of chemistry. Courses not listed below may be counted in one of the five areas only with prior departmental approval.

Analytical Core Courses: CHM 5156 Advanced Chromatography; CHM 6157 Advanced Analytical Chemistry; CHM 5138 Mass Spectrometry; CHM 5165 Chemometrics

Biochemistry Core Courses: CHM 5506 Physical Biochemistry; CHM 5503 Physical Chemistry of Nucleic Acids; CHM 55325 Physical Chemistry of Proteins

Inorganic Core Courses: CHM 5440 Kinetics and Catalysis; CHM 5650 Physical Inorganic Chemistry; CHM 5540 Group Theory; CHM 5251 Organometallic Chemistry

Organic Core Courses: CHM 5250 Organic Synthesis; CHM 5236 Spectroscopic Techniques and Structure Elucidation; CHM 5260 Physical Organic Chemistry

Physical Core Courses: CHM 5490 Physical Spectroscopy; CHM 6430 Advanced Thermodynamics; CHM 6461 Statistical Thermodynamics; CHM 6480 Quantum Mechanics; CHM 5423 Atmospheric Chemistry; CHM 5540 Group Theory; CHM 5586 Computational Chemistry.

3.1.3 The student must complete at least nine (9) credits of additional core and/or elective graduate-level chemistry courses (excluding research and seminar). The courses must be approved by the dissertation committee in consultation with the graduate program director and follow these guidelines: (1) The courses must be 5000, 6000 or 7000 level chemistry courses (CHM prefixes) or courses from a related department or departments approved by the student’s dissertation committee and the graduate program director (up to a maximum of six credits).

3.1.4 Full-time graduate students are required to register for one (1) credit of CHM 6940 (Supervised Teaching) each semester they serve as teaching assistants.

3.1.5 Full-time graduate students are required to register for one (1) credit of Graduate Seminar (CHM 6935) or one credit of Chemistry Colloquium (CHM 6936) each fall and spring semester.

3.1.6 Research Seminar - Each full-time student must register for Chemistry Colloquium (CHM 6936) and present a seminar on their proposed research to their dissertation committee by the end of their third semester of graduate study (excluding summer semesters). The D-3 form (from the University Graduate School) accompanied by a summary (up to five pages) of the proposed dissertation research must be submitted to the student’s committee at least one week before the seminar is presented. All of the student’s committee members must attend the seminar and D-3 must be completed, signed and submitted to the University Graduate School (UGS). If the committee does not approve a student’s research proposal or evaluates the proposal presentation as unsatisfactory, the student must re-present the proposal in the following semester (including summer). A second failure on the proposal presentation will result in the student’s dismissal from the graduate program. Together with the submission of D-3 form and the research proposal, student must submit a certificate indicating the completion of on-line training on Responsible Conduct of Research (RCR). The on-line training course can be taken at http://research.fiu.edu/rcr/. Students from Department of Chemistry and Biochemistry should complete the “CITI Physical Science Responsible Conduct of Research Course”.

3.1.7 At least eight (8) credits of CHM 7910 (Dissertation Research) involving independent dissertation research under the direction of a faculty member in the department.

3.1.8 At least 15 credits of CHM 7980 (Dissertation) to be taken after the student has advanced to candidacy and during the semester in which the Ph.D. dissertation is to be defended.

3.1.9 Satisfactory completion of a series of 3 hour cumulative examinations. The student will begin taking the cumulative examinations after completing the proficiency requirements but no later than the beginning of the student's second semester. Seven examinations will be given per year, three in the fall semester and four in the spring semester. The student must pass 4 out of 10 consecutively offered exams for admission to candidacy. Three of the four passed examinations must be within the student’s research focus.

3.1.10 Oral (Candidacy) Examination (D-2 and Departmental Form: Oral Exam Form). Satisfactory completion of an oral examination is required of all students working toward the Ph.D. **The examination must be completed before the end of the fifth semester (excluding summers).** The examination involves written and oral presentation of the progress and future direction of the student’s research, on the basis of which the oral examination is conducted. **At least one portion of the proposed work (one element or aim) must be an original contribution from the student. There is no expectation that the student pursues the aim as part of their dissertation research. The original aim(s) must must be related to the research topic but must be conceived independently by the student and not under active investigation in the advisor's lab or described in the advisor’s papers. The original contribution should go beyond an incremental or obvious extension of the approved research proposal or their advisor’s research. The advisor should neither suggest potential aims to the student nor provide a topic in the form of a previously submitted grant proposal. The student must obtain approval of their original contribution from the dissertation committee prior to the start of the 5th semester (not including summers). The student shall prepare a one-page “Specific Aim(s)” summary to their dissertation committee and a separate page of references. The dissertation committee shall approve the aim(s) if determined to be sufficiently original. The dissertation committee may reject the proposed aim(s) if it is not original.** The student will prepare a ~~10-15~~ **15 – 20** page (double spaced, 12 point Times New Roman or equivalent font size and line spacing using standard margins, excluding a cover page and references) written report which describes the student’s progress in research and proposes the future direction of the student’s doctoral research **and the developed original aim(s)**. The report will be prepared in a general manuscript format of a peer-reviewed scientific journal and must be submitted to the committee one week prior the presentation. The student will make an oral presentation to the dissertation committee based on the written report. The oral examination will be conducted at the conclusion of the oral presentation. The oral examination ~~will take place at least 3 months after the original proposal defense and~~ can only be presented following successful conclusion of cumulative exams~~, the~~ course work~~,~~ and research proposal ~~and the original proposal~~. This generally would occur after a minimum of 36 credits in residence and no later than the end of the 5th semester of study (excluding the summer semesters). Any delay of the candidacy examination beyond the end of the 5th semester of study requires approval by the graduate committee. The examination will be conducted and evaluated by the dissertation committee to test the student’s doctoral research project and mastery of his or her field of specialization, as well as any other relevant areas of chemistry or cognate fields. **The original contribution shall be evaluated for (1) rational, (2) feasibility, (3) originality, and (4) significance.** A majority decision by all committee members is required to successfully pass the candidacy exam. The student either passes or fails on the performance on the exam and cannot be passed upon condition of satisfactory completion of courses or submission of research papers.

3.1.11 Submission and public presentation and defense of a satisfactory research dissertation as determined by the dissertation committee.

## 3.2 Dissertation Committee

3.2.1 Full-time students must choose a major professor (research advisor) and appropriate project within the first semester of study (part-time students are expected to choose a research advisor prior to the completion of 9 graduate credits). The Ph.D. graduate student's dissertation committee will consist of five voting members any additional committee members will be non-voting. The graduate student's Ph.D. dissertation committee will consist of the research advisor, a FIU graduate faculty member from outside the department, a randomly chosen committee determined by the departmental graduate committee from the departmental graduate faculty and at least two additional committee members who have expertise in the graduate student’s research area. At least two members of the students Ph.D. dissertation committee must be tenured in the Department of Chemistry and Biochemistry. Please visit UGS web at http://gradschool.fiu.edu/documents/D1\_Appointment\_of\_Dissertation\_Committee.pdf for updated information.

3.2.2 The major professor must have Dissertation Advisor Status and must be tenure earning, tenured, or a secondary faculty in the Department of Chemistry and Biochemistry at FIU and will chair the research committee. The remaining research committee members can be selected from among other FIU graduate faculty members or professionals from external agencies. Scientists from outside FIU must submit curriculum vitae for approval by the departmental graduate committee and the UGS. The curriculum vitae will be attached to Form D-1 (appointment of a dissertation committee) for approval. Under no circumstances may an external research supervisor be the chair of the student's research committee. Committee members may not be relatives or family members of a student. Faculty may not serve on the committee of a student when a conflict of interest exists; this includes personal and/or business relationships.

3.2.3 To serve as chair of a committee, a faculty member must:

* be a tenure-earning or tenured member of the Department of Chemistry.
* have specialized academic competence in the student's proposed research area.
* have taught a graduate course in the last three years or had a graduate student who graduated in the last three years.
* have published an article in a peer reviewed journal in the last three years or had research funding during the last three years.

3.2.4 To serve as a committee member, the faculty member or external research scientist must have taught a graduate course in the last three years or published an article in a peer-reviewed journal within the last three years. These guidelines may not adequately cover all situations. Therefore, faculty members may make a written appeal to the graduate committee. If necessary, an appeal of the graduate committee's decision will be made to the entire faculty.

3.2.5 The research committee functions:

* to advise the student in all academic and research matters
* formulate a course of study
* review program progress on the dissertation research (seminar)
* prepare, conduct, and evaluate the oral proposal defense and examination
* administer the defense of dissertation
* render final approval of the dissertation

## 3.3 Dissertation Committee Appointment (D-1)

The student should consult with his major professor on the selection of a dissertation committee to consist of five faculty members. The composition of the committee must meet Department and University Graduate School Requirements. D-1 should be completed and submitted to the Graduate Studies Office immediately upon formation of a thesis committee (early in the student’s third semester of study). It may be necessary to change the composition of a thesis committee at some point during a student’s program of study. In such a case, the student must file D-1r to the graduate committee and UGS for approval. If a student requests a change of major professor, the student must submit a written request to the Graduate Committee for approval. If the dissertation research has changed significantly, a new summary of the thesis research should be submitted with the revised D-3.

## 3.4 Admission to Candidacy (D-2)

3.4.1 A graduate student is not a candidate for the Ph.D. degree until granted formal admission to candidacy - D-2. Such admission requires approval of the student's dissertation committee, the Graduate Program Director, the Dean of the College of Arts & Sciences, and the Dean for Graduate Studies. Approval is based on:

* completion of required course work
* satisfactory completion of research seminar
* successful completion of the Cumulative Examinations
* satisfactory completion of the oral (candidacy) exam

3.4.2 A student may not enroll for dissertation credits until the semester after he/she is admitted to candidacy. At least two semesters must elapse between admission to candidacy and awarding of the Ph.D. degree.

## 3.5 Research seminar (D-3)

See 3.1.6 above

## 3.6 Annual Review

3.6 Each year, the student will participate in the annual review and complete committee report of annual dissertation progress conference (Annual Student Evaluation and Mentoring Plan). It is the student’s responsibility to arrange the time and location of the annual review. If the student does not have an approved D-1 form on file with UGS, only the graduate program director’s or designated advisor’s evaluation and signature are required. Otherwise, the student must schedule a meeting with his/her dissertation committee every year before a fixed deadline given by UGS (currently, May 15). The UGS will put fall semester registration on hold for any student who does not submit the Annual Student Evaluation and Mentoring Plan on time. The hold can be lifted only after the requirement is fulfilled. The committee will evaluate the student’s progress and presentation of the research project. If necessary, the major professor should poll the committee regarding the acceptability of the student’s research progress and seminar. If deemed unacceptable to one or more of the committee members, the student and/or the student's major professor should contact the pertinent committee member(s) to determine the points necessary for approval. If the matter cannot be satisfactorily resolved, the student and major professor should take the issue to the Graduate Committee for mediation. Students who are supported by a teaching assistantship or research assistantship must obtain a satisfactory review to maintain their support for the next academic year. Students who receive unsatisfactory reviews or do not undergo the review will be recommended for termination of assistantship or dismissal from the program (UGS policy). Students who have been dismissed must apply for readmission if they wish to complete their degree.

## 3.7 Preliminary approval of dissertation and request for oral defense (D-5)

The dissertation defense is a university requirement. The defense must be scheduled and held to comply with University Graduate School deadlines. The Graduate Division publishes their deadlines for submission on their website http://gradschool.fiu.edu/calendar-deadlines/ The Dean of the College has a zero tolerance policy on the College deadlines. Thus, the student who does not comply with these deadlines may be forced to enroll for another semester to be able to graduate.

A copy of the dissertation, certified as complete and provisionally acceptable and one copy of the Dissertation Defense Announcement must be submitted with D-5 to the UGS at least THREE (3) weeks before the proposed date of the defense or by the UGS catalog deadline, whichever is earlier. An electronic version of the thesis defense announcement must be sent to [ugs@fiu.edu](mailto:ugs@fiu.edu) and posted. The College of Art and Sciences requests the aforementioned document be submitted to the Dean’s Office ONE (1) week prior to the UGS deadline. The student must submit the dissertation to the dissertation committee and the graduate program director for approval one week prior to the submission to the College.

## 3.8 Final Approval of Dissertation

Complete Final ETD Approval form must be submitted in accordance with the College of Arts and Sciences and Graduate School deadlines after a final copy of the dissertation is approved by the committee.

## 3.9 Active Status and Time Limitations

Continuous registration will be required for all students accepted into the Ph.D. program. Full-time students must generally register for a minimum of nine credits per semester during the regular academic year, and six credits during the summer semester. Once students have advanced to candidacy, a minimum of three (3) hours per semester is required to maintain active status in the program. At the Ph.D. level, all requirements, including the successful defense of a dissertation must be completed within nine years of first enrollment in the Ph.D. program, inclusive of any leaves of absence or other interruptions of active student status. Students who do not complete their dissertation within this time period may apply for an exception to this rule by filing a Request for Exception form to the Dean of the Graduate School.

# **4. Ph. D. in Chemistry with a Forensic Track Program**

*This section provides additional information for the Ph.D. in Chemistry with a Forensic Track Program. Students enrolled in this program should read both section 3 and section 4.*

## 4.1 Admission

To be admitted into the Ph.D. program in Chemistry with a Forensic track, a candidate must:

* + 1. Hold a Bachelor’s degree in chemistry, forensic science or a relevant discipline from an accredited college or university approved by the Chemistry graduate committee. The minimum requirement is a bachelors degree in a natural science with a least 7 semester courses (28 hours including labs) of chemistry courses including physical chemistry, analytical chemistry and biochemistry. Any deficiencies must be completed before being fully accepted to the Ph.D. program.
    2. Have a 3.0/4.0 average or higher during the last two years of the undergraduate program or a Master’s degree in a relevant discipline;
    3. Submit general GRE scores. There is no minimum requirement for the overall GRE score, but the applicants with an average percentile rank of 60 on the verbal and quantitative parts of the GRE will be preferentially considered.
    4. Arrange to have three letters of recommendation sent to the Forensic Science Graduate Program Director evaluating the applicant’s potential for graduate work;
    5. Pass at least two proficiency exams in either analytical or biochemistry and either organic or physical chemistry – students who have not taken physical chemistry must take one semester of physical chemistry to make up the deficiency;
    6. Receive approval from the Forensic Science Graduate Committee;
    7. International graduate student applicants whose native language is not English are required to submit a score for the Test of English as a Foreign Language (TOEFL) or for the International English Language Testing System (IELTS). A total score of 80 on the iBT TOEFL or 6.5 overall on the IELTS is required.
    8. All admissions to the Chemistry Ph.D. program must be approved by the chemistry graduate committee and signed off by the chemistry graduate program director.

## 4.2 Degree Requirements

* + 1. A minimum of seventy five (75) credits or course work. A grade of “C” or higher must be obtained in all courses, and a cumulative GPA of 3.0 or higher must be maintained. Students must choose either the Analytical or the Biochemistry concentration. The course of study must include:
  1. Twelve credits of required classes that depend on the concentration (each of the following courses is worth three credits):

**Analytical Chemistry/Trace Concentration**

BSC 5406 Forensic Biology

CHS 5542 Forensic Chemistry

CHS 5539 Forensic Toxicology

CHS 5545 Chem Anl. Explosives

**or**

CHS 5538 Chem Anl of Drugs

**Biochemistry/DNA Analysis Concentration**

BSC 5406 Forensic Biology

CHS 5542 Forensic Chemistry

CHS 5536 Forensic DNA Chemistry

PCB 5685 Population Genetics

* 1. Two chemistry core courses chosen from the following: Advanced Chromatography (CHM 5156); Advanced Mass Spectrometry (CHM 5138); Spectroscopic Techniques (CHM 5236); Organic Chemistry of Nucleic Acids (CHM 5302); Physical Biochemistry (CHM 5506); Advanced Analytical Chemistry (CHM 6157); Chemometrics & Sampling (CHM 5165); Advanced Biological Chemistry (CHM 6982).
  2. At least one elective. The list of approved electives is maintained by the Chemistry and Forensic Graduate Committees.
  3. Full-time graduate students are required to register for one credit of CHM 6940 (Supervised Teaching) each semester they serve as teaching assistants.
  4. Full-time graduate students are required to register for one credit of CHM 6935 (Graduate Seminar) or one credit of CHM 6936 (Chemistry Colloquium) each fall and spring semester.
  5. At least one credit of CHM 6936 (Chemistry Colloquium) is required. Each student must present a seminar on their proposed research at the colloquium and to the dissertation committee for a letter grade by the end of their third semester of graduate study (see 3.1.6).
  6. At least eight credits of CHM 7910 (Dissertation Research) involving independent dissertation research under the direction of a faculty member in the Department.
  7. At least 15 credits of CHM 7980 (Ph.D. Dissertation) is to be taken after the student has advanced to candidacy.
     1. Satisfactory completion of a series of 3 hour cumulative examinations. The student will begin taking the cumulative examination after completing the proficiency requirements but no later than the beginning of the student's second semester. Seven examinations will be given per year. The student must pass 4 out of 10 consecutively offered exams for admission to candidacy. Three of the four passed examinations must be within the student’s research focus.
     2. Satisfactory completion of an oral (candidacy) examination (see 3.1.11). The examination must be completed before the end of the fifth semester (excluding summers). The examination will be conducted by the Dissertation Committee, be based on the student’s dissertation research, and include questions from the student’s major field and cognate fields. After fulfilling this requirement, passing the cumulative examinations and completing all required course work, the student advances to candidacy.
     3. Satisfactory public presentation and defense of a research dissertation, evaluated by the Dissertation Committee. The composition of the Dissertation Committee is as described in section 3 for the Ph.D. in Chemistry (no track) above.

# **5. Environmental Chemistry Track Ph.D.**

*This section provides additional information for the Ph.D. in Chemistry with Environmental Chemistry Track Program. Students enrolled in this program should read both section 3 and section 5.*

## 5.1 Degree Requirements

5.1.1 A minimum of 75 credit hours of coursework. A grade of C or higher must be obtained in all courses, and a cumulative GPA of 3.0 or higher must be maintained. The course of study must include:

a) 12 credit hours of required classes including four of the following six environmental chemistry core courses, each of which is worth three credit hours.

CHM 5423 – Atmospheric Chemistry

CHM 5765 – Aquatic Chemistry

CHM 6281 – Environmental Organic Chemistry

CHM 6340 – Organic Geochemistry

OCC 5050 – Chemical Oceanography

CHM 6088 – Environmental Chemistry of Trace Elements

b) 6 credit hours of required classes including two chemistry core courses chosen from the following:

CHM 5156 – Advanced Chromatography

CHM 5138 – Advanced Mass Spectrometry

CHM 5236 – Spectroscopic Techniques and Structure Determination

CHM 6157 – Advanced Analytical Chemistry

CHM 5165 – Chemometrics and Sampling

CHM 5260 – Physical Organic Chemistry

c) At least one elective. The list of approved electives is maintained by the Chemistry and Environmental Science Major Graduate Committee. This committee consists of the Environmental Science Graduate Program Director, the Chemistry and Biochemistry Graduate Program Director, and two Departmental faculty members active in research in environmental science.

d) Full time graduate students are required to register for one credit of CHM 6940 (Supervised Teaching) each semester they serve as a teaching assistant.

e) Full time graduate students are required to register for one credit of CHM 6935 (Graduate Seminar) or one credit of CHM 6936 (Chemistry Colloquium) each fall and spring semester.

f) At least two credits of CHM 6936 (Chemistry Colloquium) is required. Each student must present a seminar on their proposed research at the colloquium and to the dissertation committee for a letter grade by the end of their third semester of graduate study (see 3.1.6).

g) At least eight credit hours of CHM 7910 (Dissertation Research) involving independent dissertation research under the direction of a faculty member in the Department.

h) At least 15 credits of CHM 7980 (Ph.D. Dissertation) is to be taken after the student has advanced to candidacy.

i) A maximum of 36 credits may be transferred from another graduate program with the approval of the Graduate Committee. However, only six credit hours can be counted towards the formal post-baccalaureate coursework. Students must elect an appropriate course load in accordance with their research topic, and in agreement with their Graduate Committee and the Departmental Graduate Advisor.

5.1.2 Satisfactory completion of cumulative exams. The students will begin taking the cumulative examinations after completing the proficiency requirements but no later than the beginning of the student’s second semester. Seven exams, each lasting three hours, will be given each year. The student must pass four out of 10 consecutively offered exams for admission to candidacy. Cumulative exams in the area of Environmental Chemistry will be added to existing specialties.

5.1.3 Satisfactory completion of an oral (candidacy) examination (see 3.1.11). The examination must be completed before the end of the fifth semester (excluding summers). The examination will be conducted by the Dissertation Committee, be based on the student’s dissertation research, and include questions from the student’s major field and cognate fields. After fulfilling this requirement, passing the cumulative examinations andand completing all required course work, the student advances to candidacy.

5.1.4 Satisfactory public presentation and defense of a research dissertation, evaluated by the Dissertation Committee. The student’s Dissertation Committee will consist of the research advisor (an FIU graduate faculty member who holds dissertation advisor status), a member from outside the Department or School but within FIU, a randomly selected member appointed by the Graduate Program Director from the Department’s graduate faculty, and at least two additional committee members with expertise in the student’s research area. At least three members of the Dissertation Committee, including the major research advisor, must be graduate faculty members from the Department of Chemistry and Biochemistry, and at least two of these three members must be tenured. The Committee may include additional members, but they will be non-voting.

# **6. Radiochemistry Track Ph.D.**

*This section provides additional information for the Ph.D. in Chemistry with Radiochemistry Track Program. Students enrolled in this program should read both section 3 and section 6.*

## 6.1 Degree Requirements

6.1.1 A minimum of 75 credit hours of coursework. A grade of C or higher must be obtained in all courses, and a cumulative GPA of 3.0 or higher must be maintained. The course of study must include:

a) Six credits of required classes (each of the following courses is worth three credits):

CHS 6110 Topics in Radiochemistry

CHS 6111 Advanced Radiochemistry

b) Two of the following six classes:

 CHM 6480 Quantum Mechanics

CHM 6157 Advanced Analytical Chemistry

CHM 5156 Advanced Chromatography

PHZ 5340 Particle Interactions and Detection

CHM 5540 Group Theory in Chemistry

CHM 5650 Physical Inorganic Chemistry (\* to be offered now more regularly once every 2 years)

c) Three electives. The list of approved electives include:

CHM 5236 Spectroscopic Techniques and Structure Elucidation

CHM 5138 Advanced Mass Spectrometry

CHM 6088 Environmental Chemistry of Trace Elements

CHM 5165 Chemometrics and Sampling

CHM 5490 Physical Spectroscopy

CHM 6461 Statistical Thermodynamics

CHM 5440 Kinetics and Catalysis

CHM 5586 Computational Chemistry

CHM 5263 Physical Organic Chemistry

CHM 5506 Physical Biochemistry

PHZ 5234 Atomic and Molecular Collision Phenomena

PHZ 5730 Biophysical Effects of Radiation

PHZ 5734 Nuclear Medicine Physics

PHZ 5736 Therapeutic Radiological Physics

PHZ 5732 Clinical and Medical Dosimetry

d) Full time graduate students are required to register for one credit of CHM 6940 (Supervised Teaching) each semester they serve as a teaching assistant.

e) Full time graduate students are required to register for one credit of CHM 6935 (Graduate Seminar) or one credit of CHM 6936 (Chemistry Colloquium) each fall and spring semester.

f) At least two credits of CHM 6936 (Chemistry Colloquium) is required. Each student must present a seminar on their proposed research at the colloquium and to the dissertation committee for a letter grade by the end of their third semester of graduate study (see 3.1.6).

g) At least eight credit hours of CHM 7910 (Dissertation Research) involving independent dissertation research under the direction of a faculty member in the Department.

h) At least 15 credits of CHM 7980 (Ph.D. Dissertation) is to be taken after the student has advanced to candidacy.

i) A maximum of 36 credits may be transferred from another graduate program with the approval of the Graduate Committee. However, only six credit hours can be counted towards the formal post-baccalaureate coursework. Students must elect an appropriate course load in accordance with their research topic, and in agreement with their Graduate Committee and the Departmental Graduate Advisor.

6.1.2 Satisfactory completion of cumulative exams. The students will begin taking the cumulative examinations after completing the proficiency requirements but no later than the beginning of the student’s second semester. Seven exams, each lasting three hours, will be given each year. The student must pass four out of 10 consecutively offered exams for admission to candidacy.

6.1.3 Satisfactory completion of an oral (candidacy) examination (see 3.1.11). The examination must be completed before the end of the fifth semester (excluding summers). The examination will be conducted by the Dissertation Committee, be based on the student’s dissertation research, and include questions from the student’s major field and cognate fields. After fulfilling this requirement, passing the cumulative examinations and completing all required course work, the student advances to candidacy.

6.1.4 Satisfactory public presentation and defense of a research dissertation, evaluated by the Dissertation Committee. The student’s Dissertation Committee will consist of the research advisor (an FIU graduate faculty member who holds dissertation advisor status), a member from outside the Department or School but within FIU, a randomly selected member appointed by the Graduate Program Director from the Department’s graduate faculty, and at least two additional committee members with expertise in the student’s research area. At least three members of the Dissertation Committee, including the major research advisor, must be graduate faculty members from the Department of Chemistry and Biochemistry, and at least two of these three members must be tenured. The Committee may include additional members, but they will be non-voting.

# **7. Education Track Ph.D.**

*This section provides additional information for the Ph.D. in Chemistry with Radiochemistry Track Program. Students enrolled in this program should read both section 3 and section 7.*

## 7.1 Degree Requirements

7.1.1 A minimum of 75 credits of coursework. A grade of "C" or higher must be obtained in all courses, and a cumulative GPA of 3.0 or higher must be maintained.

The coursework must include:

a)  A minimum of twelve credits of chemistry courses, with a minimum of nine of these credits being Chemistry core courses. Students must select an area of concentration (Analytical, Biochemistry, Inorganic, Organic, Physical). Six credits of chemistry coursework must come from the area of concentration and six credits from outside the area of concentration.

b) At least nine credits of education research courses, including one course from each of the categories of courses listed below.

**Foundations of Education Research:**

EDF 6481           Educ. Research Methodology (F)

SCE 7761          Research in Science Education

**Quantitative Research Methods:**

EDF 6472           Introduction to Data Analysis (F/S)

STA 6166           Stat. Methods in Research I (F)

STA 6167           Stat. Methods in Research II (S)

**Qualitative Research Methods:**

EDF 6475           Qualitative Foundations in Educational Research (F/S)

c)  At least three credits of advanced methodology courses, dependent on the focus of the dissertation project. Suggested courses appear in the list below, but others can be approved of by the dissertation committee in consultation with the Graduate Program Director.

**Advanced Methodology Courses:**

EDF 7476           Advanced Methods of Qualitative Educational Research (S)

EDF 6486           Advanced Data Analysis in Quantitative Educational Research (F/S)

EDF 7489           Hierarchical Linear Modeling in Educational Research (F)

STA 5507           Nonparametric Methods (F)

STA 6244           Data Analysis 1

STA 6247           Data Analysis 2

STA 6505           Analysis of Categorical Data

STA 6746           Multivariate Statistical Analysis (F)

STA 6990           Multivariate Analysis 1

d) Full time graduate students are required to register for one credit of CHM 6940 (Supervised Teaching) each semester they serve as a teaching assistant.

e) Full time graduate students are required to register for one credit of CHM 6935 (Graduate Seminar) or one credit of CHM 6936 (Chemistry Colloquium) each fall and spring semester.

f) At least two credits of CHM 6936 (Chemistry Colloquium) is required. Each student must present a seminar on their proposed research at the colloquium and to the dissertation committee for a letter grade by the end of their third semester of graduate study (see 3.1.6).

g) At least eight credit hours of CHM 7910 (Dissertation Research) involving independent dissertation research under the direction of a faculty member in the Department.

h) At least 15 credits of CHM 7980 (Ph.D. Dissertation) is to be taken after the student has advanced to candidacy.

i) A maximum of 36 credits may be transferred from another graduate program with the approval of the Graduate Committee. However, only six credit hours can be counted towards the formal post-baccalaureate coursework. Students must elect an appropriate course load in accordance with their research topic, and in agreement with their Graduate Committee and the Departmental Graduate Advisor.

7.1.2 Satisfactory completion of cumulative exams. The students will begin taking the cumulative examinations after completing the proficiency requirements but no later than the beginning of the student’s second semester. Seven exams, each lasting three hours, will be given each year. The student must pass four out of 10 consecutively offered exams for admission to candidacy. At least three of the exams must be from their area of concentration.

7.1.3 Satisfactory completion of an oral (candidacy) examination (see 3.1.11). The examination must be completed before the end of the fifth semester (excluding summers). The examination will be conducted by the Dissertation Committee, be based on the student’s dissertation research, and include questions from the student’s major field and cognate fields. After fulfilling this requirement, passing the cumulative examinations and and completing all required course work, the student advances to candidacy.

7.1.4 Satisfactory public presentation and defense of a research dissertation, evaluated by the Dissertation Committee. The student’s Dissertation Committee will consist of the research advisor (an FIU graduate faculty member who holds dissertation advisor status), a member from outside the Department or School but within FIU, a randomly selected member appointed by the Graduate Program Director from the Department’s graduate faculty, and at least two additional committee members with expertise in the student’s research area. At least three members of the Dissertation Committee, including the major research advisor, must be graduate faculty members from the Department of Chemistry and Biochemistry, and at least two of these three members must be tenured. The Committee may include additional members, but they will be non-voting.

# **8. General Information**

## 8.1 Financial assistance

8.1.1 Various forms of financial assistance are available to graduate students at FIU. Recommendations for aid as well as admission into the program are based on the initial ranking of new students by their GRE and GPA scores. In addition, graduate students are encouraged to apply for external support for their graduate work (e.g., Sigma Xi, NSF, etc.). Proposals to funding agencies must have the approval of the Department of Chemistry and, in some cases, the Division of Sponsored Research. Graduate stipends for TA's and RA's and some tuition fee waivers (partial and full) are available to eligible students.

8.1.2 Graduate assistantships are renewed each term. While we expect that an assistantship will be renewed for up to four years for Ph.D. students, satisfactory progress toward the degree is a condition of renewal. Students will be notified each academic year regarding renewal of an assistantship, amount of stipend/tuition waiver and responsibilities for the following term.

## 8.2 Guidelines for graduate assistantships (GAs)

8.2.1 Research assistantships are intended to:

* provide financial support for graduate students working toward their M.S. or Ph.D. degrees.
* give graduate students the opportunity to obtain university research experience under the guidance of departmental faculty. Specific research duties are assigned by the major professor.

8.2.2 Teaching assistantships are intended to:

* provide financial support for graduate students working toward their Ph.D. degrees.
* give graduate students the opportunity to obtain university teaching experience under the guidance of departmental faculty. Specific requirements for a TA will be determined by the faculty member to whom they are assigned.
* enable the department to meet the teaching demand of multiple-section high-enrollment laboratory courses.

## 8.3 Duties of teaching assistants (TAs)

8.3.1 Teaching Assistants are typically assigned for 20 hours per week, usually 2-3 sections of a laboratory class during the academic year. Students will be paid in bi-weekly paychecks. Assigned duties may include:

* supervision of 2-3 laboratory sections per week. Since some laboratory courses meet for differing lengths of time, alternate duties may be added or subtracted to ensure that TA effort workloads are equally distributed
* grading of lecture- or laboratory-related quizzes, exams, reports, etc.
* attendance at weekly laboratory meetings and/or course-related lectures
* preparation and organization of laboratories
* consultation and office hours with students
* proctoring and grading of lecture exams
* attendance of workshops and meetings held by the department as required for training and coordination.

8.3.2 Teaching assistants are required to enroll in 1-2 credits of supervised teaching CHM 6940, prior to csndidacy. The course may include teaching orientation and regular meetings to address teaching issues throughout the semester and all TAs are required to attend.

## 8.4 Responsibility of supervising faculty

The role of faculty members in courses which require a TA's is that of a mentor. Faculty should strive to make the laboratory portion of their courses run smoothly by ensuring:

* that the material to be presented by the TA is clearly defined and available well in advance of the laboratory
* that TA's are properly briefed on each experiment, the lab techniques and expected results for each laboratory
* that all reagents and supplies have been adequately prepared and are available for the TA before a laboratory begins
* evaluate the TA’s performance following each semester.

## 8.5 Evaluation of TAs

TAs will receive an evaluation from students in every laboratory that they teach. Copies of the student evaluations and any student comments are also added to the student's file and sent to the faculty member that supervised the TA within 60 days of the end of the semester. Graduate students who have also enrolled in CHM 6940 to fulfill the teaching requirement for the Ph.D. degree will also receive a P/F grade based on their performance in teaching. Faculty members must submit to the Chemistry Graduate Program Director written evaluations for each TAs. These evaluations are added to the student's file.

## 8.6 TA/Faculty grievances

On occasions disputes between a TA and a faculty member may arise. Changes in TA assignments or suggestions to resolve conflicts should be made to the Chemistry Graduate Program Director, or a member of the Graduate Committee. The Graduate Committee will review and resolve disputes in a timely fashion. A majority vote by this committee will resolve complaints. The Graduate Committee may make recommendations to the Department concerning issues of TA welfare. Formal Grievance procedures are described in the Universities Graduate Policies and Procedures Manual.

## 8.7 Obtaining Florida Residency

8.7.1 To be considered for Florida residency, the student must be a U.S. citizen or legal alien, and independent (i.e. your parents do NOT claim you on their taxes and you file your own taxes). To apply, the following information and any other documentation proving your ties to the state of Florida must be taken to the Registrars Office to be reviewed. All of the following documents must be dated one year prior to the time that you apply for residency. Therefore, it is extremely important to get the following items BEFORE YOUR FIRST SEMESTER BEGINS.

8.7.2 Proof of Residency:

* Florida Driver’s License
* Voter’s Registration Card
* Florida Vehicle’s Registration
* Declaration of Domicile (from a Dade County Court and signed by a Notary Public of Florida)
* Proof of Independence (ex. Tax forms)
* Permanent Employment (ex. show contract)
* Residence during periods of non-enrollment
* Lease/Own Home/Own Property
* Checking Account with a Florida Bank

8.7.3 Obtaining Florida residency is mandatory for any student eligible US citizen or legal/permanent resident who is seeking financial support from the department. The department will only pay an eligible U.S student’s out-of-state tuition for one academic year; otherwise, the increased fees are the burden of the student.

## 8.8 Withdrawal/leaves of absence/re-admittance

8.8.1 Graduate students who have not been registered for two consecutive semesters, including the summer session, will be dropped from the graduate program and must apply for re-admission through the Admissions Office.

8.8.2 If a student finds it necessary to be excused from registration in the program for two or more consecutive semesters he/she must formally request a leave of absence from the graduate program. Leave will be granted only under exceptional circumstances. When the student returns from a leave of absence, decisions concerning previous or current programs of study will be mutually agreed upon by the graduate committee, the student's thesis committee and the student.

8.8.3 A leave of absence does not extend the amount of time allotted for degree completion. The six years for the MS and nine years for the Ph.D. are calculated from the entry date in the program and do not take absence from the program into account. Students who have been dismissed from the program may not be considered for re-admission into the program within a year.

## 8.9 Research and Patents

The results of a graduate student's research could lead to a patent and the payment of royalties. The University claims no rights to patent royalties if the research is performed in a laboratory outside of the University under close cooperation with an outside advisor. The University insists, however, that the student receive a fair share of any financial benefits from such a patent. If the patented work is done in a University laboratory with the frequent consultation of regular faculty, the University may claim a portion of the royalty. Negotiations on such claims will be conducted by the Provost's Office.

## 8.10 Forgiveness policy

## 

• After Summer 2012 – the Forgiveness policy is permanently discontinued. With this policy change, students may repeat courses, but all graduate coursework, including repeats, will be calculated in the GPA.

.

## 8.11 Transfer of graduate credits

Some course credits earned elsewhere as a graduate degree-seeking student may be transferred and credited toward the graduate degree with approval of the Graduate Committee. Official request for consideration of transfer credits must be submitted to the graduate committee within two semesters of the student’s entry into the graduate program.

Doctoral program may accept a maximum of 6 semester hours of graduate credit earned from another institution beyond a bachelor's degree. An exception is made for courses contained within an earned master's or doctoral degree. For such courses, the maximum is one fewer than half of the total credits required for the program.

Masters program may accept a maximum of 6 semester hours of graduate credit earned from another institution beyond a bachelor's degree.

Acceptance of transfer credits for a course is dependent upon the following provisions:

* the student received a grade of 3.0 or better on a 4.0 scale
* the course was taken at an accredited institution at a higher or equivalent ranking as FIU
* the course was relevant, as judged by the Graduate Committee of the Department
* the course is listed on an official transcript received by the Graduate Admissions
* the course will be no older than 6 years or 9 years at the time of graduation with a master's or doctoral degree, respectively (does not apply to credits earned as part of an earlier earned graduate degree)

## 8.12 Rights and responsibilities

The University has developed policies and procedures on the rights and responsibilities of students and a code of conduct assuring that these rights may be freely exercised without interference or infringement by others. The code of conduct, academic misconduct policies, student grievance procedures and policies on student records are reported in detail in the University publication Rights and Responsibilities of Students. All administrative procedures and time deadlines must be met, whether or not they are specifically mentioned in this document. Students must operate within the rules and guidelines of the Graduate Policy and Procedures Manual, Graduate Catalog and the Regulations for Thesis and Dissertation Preparation Manual. Accordingly, graduate students should obtain copies of these publications from the Graduate Studies Office or visit the Graduate Division website (www.fiu.edu/~gradstud/) and be familiar with their contents.

# **9. Appendix**

9.1 University Graduate School Forms **are available on-line at** [**www.fiu.edu/ugs/**](http://www.fiu.edu/ugs/)

Master’s Degree Forms

M-1 Appointment of Thesis Committee (must be completed at the beginning of the second semester)

M-1r Appointment of Revised Thesis Committee

M-2 Master’s Thesis Proposal (submitted after research seminar)

M-3 Preliminary Approval of Thesis and Request for Oral Defense (student must submit thesis at least 3 weeks prior to filing this form)

#### Final Electronic Thesis or Dissertation (ETD) Approval

Doctoral Degree Forms

D-1 Appointment of Dissertation Committee (must be completed at the

beginning of the second semester)

D-1r Appointment of Revised Dissertation Committee

D-2 Program for Doctoral Degree and Application for Candidacy

(submitted after candidacy examination)

D-3 Doctoral Dissertation Proposal (submitted after research seminar)

D-5 Preliminary Approval of Dissertation and Request for Oral Defense

(student must submit thesis at least 3 weeks prior to filing this form)

Final Electronic Thesis or Dissertation (ETD) Approval

**9.2 Departmental Forms**

https://chemistry.fiu.edu/academics/resources/index.html#current-graduate