

Graduate Student Policies and Procedures Manual

Biochemistry Ph.D. Program Florida International University

Effective August 12, 2012

1. Biochemistry Graduate Admission Requirements and Procedures

1.1 Graduate Admission Requirements

A minimum undergraduate grade point average of 3.0/4.0 in biological sciences, biochemistry, 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.

The graduate committee of the Program 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 teaching assistantship (TA) positions in the upcoming fall semester. Admission to the program for a spring or summer semester is possible only on a research assistantship (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 (e.g. part-time students). The Program 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.

Full-time graduate students generally serve as Teaching Assistants (TAs) in the Department of Biological Sciences or the Department of Chemistry and Biochemistry or the College of Medicine during their first semester. Ph.D. candidates must serve at least one semester as teaching assistants. This requirement may be waived if a student has had equivalent training previously based upon request. 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. University policy requires a student to maintain a $GPA \geq 3.0$ 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 @ <http://www.fiu.edu/gradadm>. Additional program information is available on line @ <http://www.fiu.edu/biochemistry>. 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, TOEFL, and TSE scores, they are forwarded to the Biochemistry Ph.D. program for evaluation. Formal admission to the program and award of teaching assistantships are granted by the Graduate Program Director in consultation with the Biochemistry Graduate Committee. The program can accept students at the beginning of each semester (fall and spring). 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: Doctoral graduate programs in Biochemistry require the satisfactory completion of a variety of lecture courses including a minimum number of required courses. Full-time Ph.D. students supported on assistantships in general must register for 9 credits in the first semester plus 1 additional credit for research rotation and subsequently 9 credits each fall and spring semester and 6 credits of research during the summers. Students who have advanced to their Ph.D. candidacy will only register 3 credits of research.

1.4 Choosing a research laboratory and research advisor

Each new graduate student shall be required to choose three laboratories in which to do his or her research rotation in the first year of graduate study. Each rotation will take three months and will officially start from October 1 and end on June 30. The student will be evaluated on his or her performance during each rotation. After completing three (or in exceptional cases, four) rotations, students will submit an ordered list of three advisors they would like to work with to the BGC. The BGC will make the assignment. Usually, but not necessarily always, this will be the student's top choice. Final approval and acceptance must be obtained before beginning formal work with the agreed upon research advisor. Each student should submit paperwork to their committees (D-1) for approval to the University Graduate School in the beginning of their third semester.

In a case that a student fails to find a research advisor, the student will be automatically dismissed from the Program, and the graduate contract and financial support of the student that includes fellowships will be automatically terminated.

- 1) In a case that a student fails to find a research advisor within 3 months after the fourth

rotation, the student will be automatically dismissed from the Program, and the graduate contract and financial support of the student that includes fellowships will be automatically terminated.

- 2) In a case that a student needs to choose a new advisor and switch to a new research group, the student must find a new research advisor within 3 months starting from the date the student leaves the previous group. If the student fails to find a new research advisor, the student will be automatically dismissed from the Program, and the graduate contract and financial support of the student that includes fellowships will be automatically terminated.

2. Doctor of Philosophy (Ph. D.) in Biochemistry Program

2.1 *Specific Requirements*

- 2.1.1 Ph. D. in Biochemistry will require 75 semester hours. A cumulative GPA of 3.0 or higher is required.

Students must complete seven required courses and take a minimum of one of the elective courses (listed below) as needed for their research.

Required core courses:

	REQUIRED CORE COURSES	Credits
First semester	CHM6036 Advanced Biochemistry I	3
	BCH6108 Biochemical Techniques	3
Second semester	CHM6037 Advanced Biochemistry II	3
	PCB 6027 Molecular and Cellular Biology II	3
Third semester	PCB 6025 Molecular and Cellular Biology I	3
Fourth semester	BCH 6831 Introduction to Biochemical Research	3
Fourth or fifth semester	CHM 6802 Ethics, Publication, and Intellectual Property	1

	COURSES BEYOND THE CORES	Credits
CHM, BSC, PCB, MCB or BCH	One Elective, see below	3 (minimum)
BSC 5945 or CHM 6940	Supervised Teaching	1 (minimum)

BSC 6913 or CHM 6910	Student Research Laboratory or Graduate Research in Biochemistry (for Lab Rotations)	1
BCH7930	Biochemistry Graduate Seminar	1
BSC 6913 or CHM 7910	Dissertation Research (Supervised Research)	24 (minimum)
BSC 7980 or CHM 7980	Ph.D. Dissertation (Graduate Dissertation)	1 (minimum)

The student must complete at least (3) credits of elective courses (excluding research and seminar). The elective courses must be chosen from the following list.

ELECTIVE COURSES

Course Number	Description	Credits
COURSES		
BSC 6415 BSC 6415L	Animal Cells in Culture Animal Cells in Culture Lab	3 2
CHM 5302	Organic Chemistry of Nucleic Acids	3
CHM 5306	Special Topics of Biological Chemistry	3
CHM 5325	Physical Chemistry of Proteins	3
CHM 5351	Computer Modeling of Biological Molecules	3
CHM 5440	Kinetics and Catalysis	3
CHM 5503	Physical Chemistry of Nucleic Acids	3
CHM 5506	Physical Biochemistry	3
CHS 5536	Forensic DNA Chemistry	3
MCB 6935	Advanced Topics in Microbiology	3
PCB 5665 PCB 5665L	Human Genetics Human Genetics Lab	3 2
PCB 5725	Membrane Signal Transduction	3
PCB 5786	Membrane Physiology	3
PCB 6236	Comparative Immunology	3
PCB 6526	Advanced Molecular Biology	3

PCB 6566	Chromosome Structure and Function	3
PCB 6786	Membrane Biophysics	3
PCB 6935	Advanced Topics in Genetics	3
PHZ 6255	Molecular Biophysics	3
	WORKSHOPS	
BCH 6130C	DNA Synthesis & Amplification	1
BCH 6132C	Electrophoresis	1
BCH 6133C	DNA Sequencing	1
MCB 5315C	Prokaryotic Cloning	2

2.1.4 Full-time graduate students are required to register for one (1) credit of BSC 5945 or CHM 6940 (Supervised Teaching) each semester they serve as teaching assistants.

2.1.5 Full-time graduate students are required to register for one (1) credit of Graduate Seminar BCH7930 for Fall and Spring Semesters.

2.1.6 At least 1 credit (note: UGS requires 3 research credits per semester) of BSC7980 or 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.

2.1.7 The graduation requirements for the program will be:

(a) Completion of formal coursework (see above).

(b) Rotation and choosing an advisor. Students will spend 3 months in the laboratories of each of three Biochemistry Graduate Faculty. Some flexibility in number of rotation is acceptable. At the end of each rotation, the student and the faculty member will complete an evaluation form. The form will be given to the BGC and kept in the student's file for reference in assessing the student's progress as well as monitoring the rotation program in general. After completing three (or in exceptional cases, four) rotations, students will submit an ordered list of three advisors they would like to work with to the BGC. The BGC will make the assignment. Usually, but not necessarily always, this will be the student's top choice. Unsatisfactory performance could lead to dismissal from the Program.

In a case that a student fails to find a research advisor, the student will be automatically dismissed from the Program, and the graduate contract and financial support of the student that includes fellowships will be automatically terminated.

1) In a case that a student fails to find a research advisor within 3 months after the fourth rotation, the student will be automatically dismissed from the Program, and the graduate contract and financial support of the student that includes fellowships will be automatically terminated.

2) In a case that a student needs to choose a new advisor and switch to a new research

group, the student must find a new research advisor within 3 months starting from the date the student leaves the previous group. If the student fails to find a new research advisor, the student will be automatically dismissed from the Program, and the graduate contract and financial support of the student that includes fellowships will be automatically terminated.

(c) Completion of Candidacy Exam. The Candidacy Exam consists of two parts: 1) Written exam (a written paper critique) in combination with a comprehensive oral examination on the content of the paper and its critique as well as any related basic knowledge; 2) Defense of Research Proposal and addressing the questions on the content of Research Proposal and related basic knowledge.

1. The written exam (paper critique) will be administered and accomplished no later than the end of the third semester of study (excluding summers). A student will be assigned a research paper by his/her research advisor and study the paper in depth, write a paper critique (no more than 6 pages single spaced), present the content of the paper and the critique on the paper, and defend his/her critique in front his/her dissertation committee. The dissertation committee will then ask questions not only about the background and content of the paper and the critique of the paper but also on related basic knowledge of biochemistry, molecular biology, cell biology and biochemical techniques that students learn from all the first-year courses. Failure on the first attempt will result in one of the following:

1) dismissal from the program

2) reexamination or

3) application for transfer to an M.S. program in one of the participating departments.

Application for transfer to an M.S. program must be made to the department's Graduate Committee by the student with approval of the student's Dissertation Committee [see (f) below]. A request for reexamination must be made to the BGC jointly by the student and the dissertation advisor. If approved by the BGC, reexamination may be scheduled after a minimum of one and a maximum of two semesters have passed. Only one reexamination will be allowed. Failure of the reexamination results in dismissal from the Biochemistry Ph.D. program.

2. Presentation of a formal proposal of the dissertation topic, the Dissertation Research Proposal (Forms D-2 and D-3). After passing the first part of the Candidacy Exam, the student will take the second part of the Exam by presenting and defending his or her doctoral research proposal followed by a formal discussion session with the Dissertation Committee. This generally would occur no later than the end of the fifth semester of study (excluding summers). Any delay of the candidacy examination beyond the end of the 5th semester of study requires approval by the Graduate Committee. The research proposal should be of moderate length (not more than 12 pages single spaced), which describes the student's progress in research and proposes the future research aims and experiments of the student's doctoral research. The report will be prepared in a general manuscript format of a peer-reviewed scientific journal and must be submitted to the committee two weeks prior to the presentation. The examination involves written and oral presentation and defense of student dissertation research proposal based on their preliminary research. The presentation and proposal defense will occur consecutively in a single session. The examination will be conducted by the student's Dissertation Committee and may include questions on the oral

presentation, the student's dissertation research, and the student's major and cognate fields. The members of the student's Dissertation Committee (see below) must be present, and they will probe the student's ability to defend the proposed research as well as to test the student's basic knowledge that is relevant to the proposal. Passing the proposal defense may not be conditional. The student either passes or fails on the basis of performance on the exam and cannot be passed contingent on satisfactory completion of courses or submission of research papers.

Upon passing the proposal defense and having successfully completed all required course work and the Qualifying Exam, the student advances to Candidacy.

Failure on the first attempt will result in one of the following:

1) dismissal from the program

2) reexamination or

3) application for transfer to an M.S. program in one of the participating departments.

Application for transfer to an M.S. program must be made by the student to the graduate committee of the department concerned, with approval of the student's Dissertation Committee. A request for reexamination must be made to the BGC jointly by the student and the dissertation advisor. If approved by the BGC, reexamination may be scheduled after a minimum of one and a maximum of two semesters have passed. Only one reexamination will be allowed. Failure of the reexamination results in dismissal from the Biochemistry Ph.D. program.

It is recommended the student refer to the websites for the National Institutes of Health, National Institute of Justice and/or National Science Foundation for specific proposal preparation and format. The student will receive a Pass (P) or Fail (F). If the student receives Fail (F), he or she may make appropriate modifications to the written proposal and re-present it orally in the following semester (including summer). A second failure on the research proposal defense will result in the student's dismissal from the graduate program.

- (d) Supervised Teaching. The ability to teach at the university level is an important skill that should be encouraged in all the graduate students. For this reason, the Ph.D. in Biochemistry requires of all students at least one semester of supervised teaching or documentation of the equivalent amount of teaching experience. In order to support the breadth of this interdisciplinary program, students will split their teaching requirement either in the Department of Chemistry & Biochemistry or the Department of Biological Sciences or College of Medicine (unless credit is given for prior teaching experience). Teaching assignments must be approved by the Biochemistry Graduate Director and may be reviewed by the student's Dissertation Committee to ensure that the student's background is appropriate for the course he or she is to teach (generally a laboratory section).
- (e) Annual Dissertation Committee Meetings (Online Annual Evaluation Form). The student's Dissertation Committee, consisting of at least four members including the student's advisor, is formed immediately after the student's advisor is chosen. The committee's purpose is to guide and monitor the student's programs through the graduate program. Each doctoral student is required to meet at least annually with his or her Dissertation Committee, and the meetings are documented by annual submission of a completed the online form to the

Biochemistry Program Director. In addition, every Spring Semester each student will meet with the Biochemistry Graduate Program Director or her/his representative to provide an independent evaluation of the student's progress. This evaluation shall become a permanent part of the student's Graduate Program File.

- (f) Submission and defense of a dissertation based upon original research in biochemistry. A dissertation is required of all candidates for the Ph.D. degree and must conform to the format outlined in the Regulations for Thesis and Dissertation Preparation Manual available to students online from the FIU Graduate School. Once a student advances to candidacy, the student must be continuously enrolled in at least three credits each semester including Summer term until he or she graduates. After submission of the dissertation and completion of all other prescribed work for the Ph.D. degree, the candidate will give a public presentation of the completed research and be given a final oral examination by the Dissertation Committee. Successful completion of all of these steps will culminate in the granting of the Ph.D. degree.

2.2. *Dissertation Committee*

- 2.2.1 Full-time students must choose a major professor (research advisor) and appropriate project by the end of the first year of study. The Ph.D. graduate student's dissertation committee will consist of minimal four members. The graduate student's Ph.D. dissertation committee will consist of the research advisor, a FIU graduate faculty member from outside the department of the student's advisor and two additional committee members who have expertise in the graduate student's research area. Please visit [UGS web at http://www.fiu.edu/ugs/PDF_forms/D1_Appointment_of_Dissertation_Committee.pdf](http://www.fiu.edu/ugs/PDF_forms/D1_Appointment_of_Dissertation_Committee.pdf) for updated information.
- 2.2.2 The major professor must have Dissertation Advisor Status, and be a member in Biochemistry Ph.D. program 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 Biochemistry Ph.D. 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.
- 2.2.3 To serve as a committee member, the faculty member or external research scientist must have Graduate Faculty status.
- 2.2.4 The research committee functions:

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

2.3. Dissertation Committee Appointment (D-1)

The student should consult with his/her major professor on the selection of a dissertation committee to consist of minimal four faculty members. The composition of the committee must meet the Program 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 second 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 form D-1r with 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.

2.4. 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/downloads/M_D_Deadlines_Calendar.pdf). A 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 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.

2.5. 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.

2.6. 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.

3. General Information

3.1 Financial assistance

3.1.1 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, NIH, NSF, etc.). Proposals to funding agencies must have the approval of the Biochemistry Ph. D Graduate Program Director 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.

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

3.2 Guidelines for graduate assistantships (GAs)

3.2.1 Research assistantships are intended to:

- provide financial support for graduate students working toward their 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.

3.2.2 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 Program to meet the teaching demand of multiple-section high-enrollment laboratory courses.

3.3 Duties of teaching assistants (TAs)

3.3.1 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.

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

3.4 Responsibility of supervising faculty

The role of faculty members in courses which require a TA 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.

3.5 Evaluation of TAs

TAs will receive an evaluation from students and the faculty members who oversee their teaching 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 supervised teaching 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 Biochemistry Graduate Program Director written evaluations for each TA. These evaluations are added to the student's file.

3.6 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 Biochemistry Graduate Program Director. 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 a specific department concerning issues of TA welfare. Formal Grievance procedures are described in the Universities Graduate Policies and Procedures Manual.

3.7 Obtaining Florida Residency (any of the following document as required by the University)

3.7.1 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.

3.7.2 Proof of Residency:

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

3.7.3 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.

3.8 Withdrawal/leaves of absence/re-admittance

3.8.1 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.

3.8.2 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.

3.8.3 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. A student who has been dismissed from the program may not be considered for re-admission into the program within a year.

3.9 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.

3.10 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.

3.11 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 Biochemistry 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.

The Biochemistry Ph.D. 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 Biochemistry Ph.D. program.

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 equivalent or higher ranking as FIU
- the course was relevant, as judged by the Biochemistry Graduate Committee
- the course is listed on an official transcript received by the Graduate Admissions
- the course will be no older than 9 years at the time of graduation with doctoral degree, respectively (does not apply to credits earned as part of an earlier earned graduate degree)

3.12 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.

4. Appendix

4.1 University Graduate School Forms are available on-line at www.fiu.edu/ugs/

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 research proposal defense and oral examination)
- D-3 Doctoral Dissertation Proposal (submitted after research proposal defense)
Annual Student Evaluation and Mentoring Plan
- 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

4.2 Biochemistry Ph.D. Program forms

4.3 Biochemistry Graduate Faculty

Members	Department	Email
Irina Agoulnik	Cellular Biology and Pharmacology	irina.agoulnik@fiu.edu
Alejandro Barbieri	Biological Sciences	barbieri@fiu.edu
David Chatfield	Chemistry and Biochemistry	chatfiel@fiu.edu
Jeremy Chambers	Environmental Health Sciences	jwchambe@fiu.edu
Tim Collins	Biological Sciences	collinst@fiu.edu
Anthony DeCaprio	Chemistry and Biochemistry	adecapr@fiu.edu
Nazira El-Hage	Immunology	nelhage@fiu.edu
Francisco Fernandez-Lima	Chemistry and Biochemistry	fernandf@fiu.edu
Javier Francisco-Ortega	Biological Sciences	ortegaj@fiu.edu
Konstantinos Kavallieratos	Chemistry and Biochemistry	kavallie@fiu.edu
Lou Kim	Biological Sciences	kiml@fiu.edu
Lidia Kos	Biological Sciences	kosl@fiu.edu
Watson Lees	Chemistry and Biochemistry	leeswj@fiu.edu
Fenfei Leng	Chemistry and Biochemistry	lengf@fiu.edu
Wenzhi Li	Physics	wenzhi.li@fiu.edu
Jun Li	Biological Sciences	lij@fiu.edu
Yuan Liu	Chemistry and Biochemistry	yualiu@fiu.edu
Kalai Mathee	Cellular Biology and Pharmacology	matheek@fiu.edu
Bruce McCord	Chemistry and Biochemistry	mccordb@fiu.edu
Jaroslava Miksovska	Chemistry and Biochemistry	miksovsk@fiu.edu
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Barry Rosen	Cell Biology and Pharmacology	brosen@fiu.edu
Yuk-Ching Tse-Dinh	Chemistry and Biochemistry	ytsedinh@fiu.edu
Xiaotang Wang	Chemistry and Biochemistry	wangx@fiu.edu
Stanislaw Wnuk	Chemistry and Biochemistry	wnuk@fiu.edu

**Biochemistry Ph.D. Program Lab Rotation Evaluation Form
Florida International University**

Student Name: _____ Mentor: _____

GRADE (circle one): Satisfactory Unsatisfactory

How many hours/week did the student spend in the lab: _____

Impressions of the student's overall performance (Reliability and conscientiousness, Ability to collect and analyze scientific data, Record keeping, Accuracy, Technical skills, comprehension, communication skills, self-reliance and independence, intellectual curiosity-*Emphasize the strengths and weaknesses of the student*)

Brief summary of the student's achievements:

Will you take this student if he/she chose to join your group? Yes No

Student signature: _____ Date: _____

Mentor signature: _____ Date: _____

Please, return this form no later than one week after ending the rotation to:

**Dr. Yuan Liu, Associate Professor
Director of Biochemistry Ph.D. Program
Department of Chemistry and Biochemistry
Florida International University**

Biochemistry Ph.D. Program

Choosing a Research Advisor

Students must fulfill three lab rotations before an official advisor can be assigned.

I choose

_____ as my Research advisor (1st choice)

_____ as my Research advisor (2nd choice)

_____ as my Research advisor (3rd choice)

Student's signature

Date

In accepting this student you will also take on the responsibilities of being the student's research and academic advisor. As the student's research advisor you are also expected to direct and monitor their research productivity, through periodic meetings, progress reports, and/or by meeting with the thesis/dissertation committee. Be sure to follow the Biochemistry Ph.D. program and university policies and procedures with regard to the academic requirements for the Ph.D. programs, especially concerning limitations of TAs and in recommending appropriate coursework.

Research Advisor's signature

Date

Biochemistry Graduate Program Director's signature

Date

Written critique on the paper (Single space, no more than 6 pages)

1. Summarize the work from introduction to discussion

2. Comments on “Introduction and background” by asking following questions:

- A) Why is it so important to do the work? What is the significance of the work.
- B) Did the paper give enough summarization of the work in the field?
- C) Did the authors discuss clearly about the problems and questions they are going to address in the paper?

3. Comments on “Materials and Methods” by asking following questions:

- A) Are these methods or approaches necessary and sufficient for addressing the problems in the work?
- B) What are the advantages of the methods over the others in addressing the problems in the paper?
- C) Are there any better alternative approaches?

4. Comments on “Results” by asking following questions

- A) Is the experimental design logical and reasonable?
- B) Are there enough controls for all the experiments?
- C) Are the results in each figure convincing?
- D) Do the results are strong enough to indicate or suggest a notion or hypothesis the authors proposed?
- E) Is there any flaw or defect in the experimental design and methodology?
- F) Does every piece of data make sense in supporting the conclusions?

5. Comments on “Discussions” by asking following questions

- A) Are the major points supported by the data in the results?
- B) Is the hypothetical model supported by the results?
- C) What is the impact of the work in the field?
- D) Is the work novel and innovative?
- E) How is the quality of the work in general?
- G) How can the work be improved so that it may have bigger impact in the field?

Biochemistry Ph.D. Program
Florida International University
Paper Critique Presentation Evaluation and Grade

Student: _____ **Date:** _____

Title: _____

Please place an "X" in the most appropriate category.

	Excellent (5)	Very Good (4)	Satisfactory (3)	Needs significant improvement (2)	Very Unsatisfactory (1)
Content of paper presented					
Background and Significance					
Hypothesis					
Experimental Approaches					
Results and Discussion					
Summary, References, Acknowledgement					
Paper critiques					
Comments on "Introduction and background": the importance and the necessity (research gap) of the work and working hypothesis					
Comments on "Materials and Methods": necessity, sufficiency, advantages of the methods for addressing the problem of the paper					
Comments on "Results": experimental design: logic, reasoning, reliability, control experiments, the strength of data to support the hypothesis, defects or flaws in the experimental design and methodology					
Comments on "Discussions": major points of the paper supported by the results, impact of the work in the field, the novelty and innovation of the work, general quality of the work,					

future directions					
Presentation Skills					
Loudness/Clarity					
Flow (Speed, Pauses, Time)					
Transitions					
Accuracy					
Handling of Questions					
Overall Grade					

Feedback Comments to Student:

Did the student provide you with the proposal 1 week prior to presentation? Yes No

Based on the student's overall performance, what grade would you recommend for the seminar?

Please check appropriate box.

- A (Excellent)
- B (Very Good)
- C (Satisfactory)
- D (Needs Significant Improvement)
- F (Very Unsatisfactory)

Evaluation Completed By: _____
(Signature)

Date: _____

