

# GRADUATE STUDENT HANDBOOK

## Ph.D. & M.S. Programs in Chemistry

University of Maryland, Baltimore County  
Department of Chemistry and Biochemistry  
1000 Hilltop Circle  
Baltimore, Maryland 21250  
(410) 455-2491



### Statement of Values for Student Academic Integrity at UMBC

Academic integrity is an important value at UMBC. By enrolling in a course, each student assumes the responsibilities of an active participant in the scholarly community in which everyone's academic work and behavior are held to the highest standards of honesty. Rigorous standards allow UMBC students, faculty, and administrators, as well as scholars and employers in the larger community, to trust that the work that students submit is the fruit of their own learning and academic effort.

I have read and acknowledge acceptance of this Graduate Student Handbook.

Signatures \_\_\_\_\_  
Graduate Student Graduate Program Director Date

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## **IMPORTANT CONTACT INFORMATION**

### **Emergency**

Campus Police  
(410) 455-5555 (on campus: Ext. 55555)

### **Chemistry Department Administration and Facilities**

Dennis Cuddy, Manager, Administration & Facilities  
Departmental needs, keys, equipment, academic and non-academic scheduling  
(410)-455-2522 (on campus: Ext. 52522),

### **UMBC Graduate School**

2nd floor, Administration Building  
(410) 455-2538

### **Graduate Student Association**

Commons Building, Room 308  
(410) 455-2773

### **UMBC Registrar's Office**

Academic Services Building  
(410) 455-3158

### **Financial Services**

Student Billing Services  
3<sup>rd</sup> Floor, Administration Building  
(410) 455-2288

### **UMBC GA Health Insurance / University Health Services**

Erickson Hall  
(410) 455-1556

### **UMBC Counseling Center**

[www.umbc.edu/counseling](http://www.umbc.edu/counseling)  
(410) 455-2472

### **UMBC Career Services Center**

Math/Psychology Bldg., room 212  
(410) 455-2216

## **DEPARTMENTAL ADMINISTRATION & FACULTY**

<b>Chair -</b>	Rosenzweig, Zeev, Professor
<b>Graduate Program Director -</b>	Daniel, Marie-Christine, Associate Professor
<b>Director of Admissions -</b>	White, Ryan J., Associate Professor
<b>Teaching Assistantship Coordinator -</b>	Smith, Paul J., Associate Professor

### **Faculty by Specific Research Areas**

For individual faculty research, see Departmental Website: <http://chemistry.umbc.edu/>

#### ***Analytical, Inorganic, and Physical Chemistry***

Allen, Mark A., Assistant Professor  
Arnold, Bradley R., Associate Professor  
Cullum, Brian M., Associate Professor  
Daniel-Onuta, Marie-Christine, Associate Professor  
Geddes, Christopher, Professor & Director, Institute of Fluorescence  
Kelly, Lisa A., Associate Professor  
Kyoung, Minjoung, Assistant Professor  
LaCourse, William R., Professor  
Liebman, Joel F., Professor  
Ptaszek, Marcin, Associate Professor  
Rosenzweig, Zeev, Professor and Chair  
Smith, Aaron T., Assistant Professor  
Summers, Michael F., Professor & Investigator, [Howard Hughes Medical Institute](#)  
Thorpe, Ian, Assistant Professor  
White, Ryan, Assistant Professor

#### ***Biochemistry***

Allen, Mark A., Assistant Professor  
An, Songon, Assistant Professor  
Garcin Elsa D., Associate Professor  
Kyoung, Minjoung, Assistant Professor  
Lu, Wuyuan, Associate Professor  
Rosenzweig, Zeev, Professor and Chair  
Smith, Aaron T., Assistant Professor  
Summers, Michael F., Professor & Investigator, [Howard Hughes Medical Institute](#)  
Thorpe, Ian, Assistant Professor

#### ***Organic Chemistry***

Daniel-Onuta, Marie-Christine, Associate Professor  
Fishbein, James C., Professor  
Liebman, Joel F., Professor  
Ptaszek, Marcin, Associate Professor  
Seley, Katherine, Professor  
Smith, Paul J., Associate Professor

## **DEPARTMENTAL INSTRUCTORS**

The instructors in the department play a critical role in undergraduate education. They are committed to full-time teaching, including lectures and/or supervision of associated laboratory sessions.

### **Senior Lecturers**

Carpenter, Tara	- General and Analytical Chemistry
Gierasch, Tiffany	- Tutorial Center Director and Organic Chemistry
Perks, Mark	- Organic Chemistry
Tracy, Allison	- Biochemistry Laboratory

### **Lecturer**

Hamilton, Diana	- Collaborative Learning Laboratory
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## **DEPARTMENTAL STAFF**

The staff is a dedicated team of professionals that provide vital functions to the department and its missions. As graduate students, you will have the opportunity to interact with them to assist you.

### **Departmental Administration and Facilities**

**Dennis Cuddy**, Manager, Chemistry room 108, Ext. 52522, departmental needs, keys, equipment, pre-award processes, academic and non-academic scheduling

### **Graduate Program Coordination**

**Patty Gagne**, Program Management Specialist for Chemistry Graduate Program, Chemistry room 106, Ext. 52491

### **Chemistry Office**

**Michele Mullins**, Office Supervisor, Chemistry room 104, Ext. 52505, assistant to Chair, general office administration, backup for payroll, web site duties

**Sandy Tabler**, Administrative Assistant, Chemistry room 100, Ext. 52491, front desk coordinator

### **Payroll**

**William DeVilbiss**, Business Manager, Chemistry room 101, Ext. 55962, financial reporting

**Jane Henderson**, General Assistant, University Center room 116, Ext. 58059, payroll services

### **Purchasing and Supplies**

**Creighton Smith**, Chemistry Stockroom Manager, Chemistry room 254, Ext. 52515, chemical supplies

### **Departmental Services**

**Tony Baney**, Glassblower, Chemistry room 277, Ext. 52966, provides glassware for department

**Josh Wilhide**, Chemistry room 006, Ext. 52815, mass spectrometry facility

UMBC MME Technical Service Center:

**Tim Buckheit** – Micro-fabrication, Buckheit@umbc.edu

**John Cataldi** – Machining, jcdc@umbc.edu

**Nikolai Galitsky** – Electronics, Galitsky@umbc.edu

### **Laboratory Coordinator**

**Frank Tyminski**, Laboratory Supervisor, Chemistry room 564, Ext. 52552, laboratory coordination

## **EXPECTATIONS**

### ***What does it mean to be a graduate student?***

“Being a graduate student means wanting to be the first in the world to learn something new that no one has ever known or seen before. To accomplish this you will learn to think and solve complicated problems with little or no guidance, as the obstacles that you will encounter in your research and your future will be ones that no one has ever seen before and no defined methods exist for approaching them. It will be your experience with current research methods and your ability to approach and determine a logical path to address previously unanswered problems that will be the legacy of your graduate education. This ability to approach the unknown and determine the best means by which to learn more about it is the ultimate meaning of a Ph.D. in the sciences.”

*Dr. Brian Cullum*

“Being a graduate student is an exciting opportunity to learn and practice scientific research on cutting-edge problems of critical significance. It is all accomplished via apprenticeship working under a mentor that has dedicated his or her life to add a sentence or two to the body of scientific knowledge. As a team, you will discover new molecular worlds in the bottom of flask or from the signal of a detector. The adventure that you partake of is *a journey of the mind and in the heart.*”

*Dr. William LaCourse*

## **GRADUATE SCHOOL REQUIREMENTS**

Students are expected to familiarize themselves with all the requirements of the Graduate School of the University of Maryland as described in the Graduate School bulletin.

### **Graduate School Academic Integrity Course**

<http://gradschool.umbc.edu/students/integrity/>

### **Graduate School Policies, Procedures, Forms:**

<http://gradschool.umbc.edu/students/policies/>

### **Degree Requirements and Deadlines:**

<http://gradschool.umbc.edu/graduation/reqs/>

### **Graduate Tuition and Fees:**

<http://gradschool.umbc.edu/funding/tuition/>



## **ADMISSIONS REQUIREMENTS**

### ***Undergraduate Course Requirements***

- Completed a Bachelor's Degree
  - A major in Chemistry or Biochemistry (*expected*)
    - Preferred undergraduate background includes courses in organic and physical chemistry, physics, calculus, and some work in the biochemical sciences.
    - Applications will be welcomed from students with degrees in other fields, providing their records indicate potential ability to complete the program successfully.
  - A minimum of an overall "B" (3.0) grade point average (GPA)
    - If a prospective student's overall undergraduate GPA is less than "B".
      - Provisional admittance may be granted by the Graduate Admissions Committee.
      - Any deficiencies in the student's background must:
        - be completed within one or two semesters after admission
        - not adversely affect the student's ability to handle the graduate program
        - be completed after the student enters the program either by additional coursework or by a comprehensive examination
        - Graduate credit will not be allowed for those courses taken to complete the requirements for admission to the program.

### ***Letters of Recommendation***

- Three (3) letters of recommendation with at least two from instructors involved with the student applicant during the student's tenure in a previous academic program.

### ***Examinations Required***

- Graduate Record Examination (GRE) Verbal, Quantitative, and Analytical Aptitude Tests are required and the Advanced Chemistry Test is recommended.
- Test of English as a Foreign Language (TOEFL) Examination.
  - Foreign students are expected to obtain a score of 550 or above for the paper-based test, or 80 or above for the internet-based test.

### ***Program Interest***

- All prospective students are required to provide a statement (ca. one typewritten page) describing their interests and reason for pursuing the M.S. or Ph.D. degree.

**NOTE:** The Graduate Record Examination, along with transcripts and recommendations, are intended to provide the Department with as much background information as possible to help evaluate the student's qualifications for entry into the program.

## **PROGRAMS, COMMITTEES AND ADVISEMENTS**

### ***Summer Bridge Program***

This program is intended to assist the incoming new graduate students in a smooth transition to UMBC. When offered, all entering Ph.D. and M.S. students who opt to participate in the Summer Bridge program will be assigned to the Director of the Summer Bridge Program for advisement. The Director will assist the student in adjusting to the academic and social settings of UMBC, follow the student's progress in the Summer Bridge coursework, and provide directions for summer research rotations.

### ***Faculty Advisor for Incoming Students***

The Graduate Program Director serves as the Faculty Advisor for all entering Ph.D. and M.S. students, by assisting them in the selection of courses. This role of Faculty Advisor is only temporary until the student selects a permanent research advisor to carry out his/her dissertation/thesis research.

### ***Research Mentor***

The research mentor or advisor guides his or her research trainee in their professional development over the duration of their dissertation/thesis research. The mentor will assist in the selection of courses, learning and practicing the scientific method, and preparing the student for a lifelong career in their chosen discipline.

***DEGREE PROGRAMS:***    *Ph.D., M.S.*

## **Ph.D. Program**

The Ph.D. program in Chemistry allows students to concentrate in Biochemistry, Organic Chemistry, Analytical, Inorganic or Physical Chemistry. There are five stages of academic progression toward successful completion of the Ph.D. degree as shown below:

### ***Stages of Progression***

1. Completion of Course Requirements, CHEM 690 Seminar, and Choosing an Advisor
2. Literature Review
3. Candidacy Exam
4. Independent Research Proposal
5. Dissertation Defense

The above stages of progression and the timeline for completion of each are shown below in a tabular form for easy reference. The detailed descriptions of each stage follow the table.

**Table I: The Progression Milestones for a Ph. D. Degree**

Year	Semester	Activities
1	1	Core Courses + CHEM 714 + Lab Rotations (CHEM 602)
	2	Core/Elective Courses + CHEM 690 + CHEM 714 + Choosing an Advisor
2	3	Appointment of Committee Members + Literature Review (CHEM 720) + Additional Elective Courses
	4	CHEM 600+ Research (CHEM 898)
3	5	Advancement to Candidacy + Research (CHEM 898)
	6	Research in Progress (CHEM 899)
4	7	Research in Progress (CHEM 899) + Independent Research Proposal
	8	
5	9	Research in Progress (CHEM 899) + Final Dissertation Defense
	10	

## **Stage 1: Completion of Course and Teaching Requirements**

### **& CHEM 690 Seminar**

#### ***(a) Placement Examinations***

All incoming students are required to take placement examinations in order to assist in choosing coursework during the first year of graduate studies for specifically addressing an individual student's course needs.

- Placement examinations in undergraduate organic and physical chemistry.
  - Placement examinations are given immediately prior to a student's entering semester, during the Orientation Week.
- Course waivers in other core course areas.
  - Any student may petition the Graduate Committee to place out of core courses due to successful completion of similar courses at other institutions or by examination (Placement examination or other). This petition must be submitted to the Graduate Committee no later than the student's first semester of study.
- Based upon the scores of placement examinations, the student
  - May be exempted from the appropriate core courses.
  - May be instructed to enroll in the core course.
  - May be asked to take remedial undergraduate courses (CHEM 601) to be determined by the Graduate Committee.
    - A grade of "B" or better must be obtained for any remedial course work taken or risk dismissal from the program.

#### ***(b) Coursework: Common Core Courses in the First Year***

Students are recommended to concentrate on core courses during the first year. These courses are selected with the guidance of your temporary Faculty Advisor. Students supported by teaching or research assistantships generally take two courses per semester in addition to the Seminar, and Rotation. These courses are to be taken for grade and not P/F or audit, and dropping or withdrawing from a course without prior consent by the Chemistry Graduate Program Director is not permitted.

All graduate students, whether master's or doctoral, must successfully complete **three (3) out of five** basic core courses:

- Chemical and Statistical Thermodynamics, CHEM 611
- Inorganic Chemistry, CHEM 605
- Advanced Biochemistry, CHEM 632 (Students concentrating in Biochemistry **must** enroll in CHEM 632 as part of the three core requirements.)

**Important note:** This course will start being offered in Spring 2018, so **Comprehensive Biochemistry, CHEM 437, will be the core course in Fall 2016.**

- Mechanisms of Organic Reactions, CHEM 651 **or** Organic Synthetic Methodologies, CHEM 654.
- Advanced Analytical Methods, CHEM 667.

### ***(c) Departmental Seminar/Ethics***

- All first year students must enroll in CHEM 714, Ethics in Current Chemical/Biochemical Research, both Fall and Spring semesters. This course will entail weekly departmental seminars on current research in chemistry/biochemistry by experts in combination with discussions of critical ethical topics to researchers. The combined course format of seminar and ethics will allow graduate students to apply what they have learned in ethics discussions to potential case studies (both theoretical and those from current research efforts presented in seminars).
- All first year students are required to attend the seminars even if they are not formally enrolled in CHEM 714 (which could happen should the sum of a semester's credits of two courses plus CHEM 602 or CHEM 690 equal or exceed 10 credits).
- Only students with a Teaching Assignment conflict will be allowed to defer enrollment in CHEM 714 to the following semester. Attendance on all non-conflict days is still required.

### ***(d) Research Rotation and Choosing an Advisor***

During the Fall semester, each student will become familiar with various research programs in the Department, and is expected to speak to at least three faculty members about their research. The student, in consultation and consent by the concerned faculty member, will select a laboratory in which he/she will do a research rotation, to be initiated in the first semester. After completion of the first rotation, the student is encouraged to do one or two additional research rotations in other labs depending upon the individual interest and need.

All students will enroll in CHEM 602 (1 credit), Introduction to Laboratory Research, during their first semester, to account for one of their research rotations.

- The selection of a dissertation advisor is based upon mutual consent between the concerned student and the faculty member, and upon the approval of the Chair of the department.
- The advisor selection must be completed no later than the end of the second semester into the graduate program, or you will be switched to the Non-Thesis M.S. program.

***(e) CHEM 690 Seminar during the Second Semester***

All students must register for CHEM 690, a required seminar course, and give an oral presentation to the Department during the *second semester of study in the graduate program*. The topic for the seminar should not be related to the actual graduate research if the student has already chosen an advisor, and must be approved by the faculty member in charge of the course for that semester. The students will be evaluated for their Presentation Skills, Organizational Ability, In-depth Exploration and Critical Assessment of the Topic. Students who fail may be given a second chance to repeat the presentation with the same or a different topic in the following semester, but failure beyond the second attempt will require a new topic for presentation. In any case, no more than three attempts may be granted for passing this course requirement.

***(f) Completion of Additional Coursework Requirements***

In addition to fulfilling the three core course requirements, the students enrolled in the doctoral program must complete the following advanced course requirements.

Three (3) additional 600 level courses (9 credits; excluding 600, 601, 602, 690, 714 or research credit courses) chosen with the approval of the research advisor and student's Dissertation Committee, if applicable.

- Students concentrating in Biochemistry must enroll in CHEM 638 as one of the electives.
- Students in the CBI program may substitute a suitable (as deemed CBI by the student's mentor) advanced biology, biochemistry or chemical/biochemical engineering course at the 600- level for a chemistry elective course requirement.
- All students must also register for CHEM 600 (Advanced Laboratory Project) for 2

credits during the *fourth* semester of study in the graduate program.

- Eighteen (18) credits of CHEM 899, Dissertation Research, after the student has been admitted to candidacy. All students performing doctoral research, but who are not yet admitted to candidacy, must instead enroll in CHEM 898, Pre-Candidacy Doctoral Research.

### ***(g) Teaching Requirements***

Two (2) semesters of teaching is required of all Ph.D. candidates.

- This requirement may take the form of lectures, laboratory supervision, demonstration, tutorial assistance, and grading of examinations and term papers. The teaching requirement may be satisfied at any time during a student's tenure. However, it will be normally accomplished prior to the end of the third (3rd) year. Exceptions can be made by petition to the graduate committee.

## **Stage 2: Literature Review**

### ***(a) Appointment of Dissertation Committee***

After completion of the core courses and CHEM 690 seminar, the Dissertation Committee will be appointed by the student's Research Advisor by the end of the *third semester* in order to monitor the progress of the student at each level starting from Stage 2 (Literature Review). The same committee can also serve as the Final Dissertation Defense Committee after officially being appointed as such by the Dean of the Graduate School at or close to the time of graduation (see below). The committee will normally consist of a total of five faculty members, *three* of whom, including the Advisor, are from the student's own Division (The three divisions in the Department include Organic Chemistry, Biochemistry and the combined Inorganic/Physical/ Analytical Chemistry), *one* of whom is from outside the Division, and *one* from outside the Chemistry Program whether from within or external to the University. The members of this committee are appointed by the student's Research

Advisor. In order to best monitor the student's progress toward Ph.D. degree, the committee membership shall be kept constant until graduation, if at all possible.

### ***(b) Completion of Literature Review Requirement***

All Ph.D. students must enroll in CHEM 720, Critical assessment of the Scientific Literature, during their third semester of graduate studies. This is an oral presentation of a thorough literature review on the topic of dissertation research. *This requirement must be completed by the end of the third semester into the graduate program.* This is a closed meeting with members of the dissertation committee, *including the Advisor, who chairs the committee.* The candidate must submit a brief written report on the research topic to each member of the committee two weeks in advance of the examination. The report should state, in 5 double-spaced pages or less (not including references), the specific aims, significance, and the methods involved. Although there is no page limit for the number of references to be listed, it is expected that the student has a good familiarity with any reference that is included. The candidate is expected to demonstrate in-depth background knowledge of the field of his/her dissertation research.

The Research Advisor will report the results in writing to the Graduate Program Director or the Graduate Program Coordinator, and will give a grade (P/F/I) for CHEM 720 at the end of the semester.

### **Stage 3: Advancement to Candidacy**

This is a closed oral examination of the candidate with the Dissertation Committee for assessment of his/her *proficiency in conducting the dissertation research.* The Research Advisor participates in conducting the candidacy examination by chairing the committee. The first attempt at this exam *should take place before the end of the fifth semester in the program and must be successfully completed by the end of third year of graduate study.* At least two weeks before the examination, the candidate must submit to the Committee a written text of 20 double-spaced pages or less, not including references, on the dissertation research. The text will consist of the specific aims, significance, preliminary results, as well as future experiments to be conducted toward completion of the dissertation. An appendix containing material in support of the inference, analysis and conclusions presented in the text may be included. Such material could include, but not be limited to, details of



experimental procedures involved, analytical, kinetic, and spectroscopic data collected, charts and graphs that are pertinent to the experiments performed, etc. The appendix material is not subject to the page limit.

The Research Advisor will report the results in writing to the Graduate Program Director or Graduate Program Coordinator. Under normal circumstances, the Committee membership will remain the same as the original Dissertation Committee described earlier. In case of unsatisfactory performance, the Committee may recommend (a) a second chance for the candidate to pass the oral examination, within a specified time limit, (b) transfer of the candidate to the M.S. program, or (c) termination from the graduate program.

#### **Stage 4: Original Research Proposal**

This requirement is to assess the proficiency of the candidate to perform creative, independent research, and is to be completed only after the student has acquired sufficient skills to conduct dissertation research with minimal supervision. This requirement could be completed subsequent to advancement to candidacy but *it should not be any later than 3 months prior to the final dissertation defense*. The subject of the proposal would presumably be in the realm of the student's scientific and experimental/theoretical expertise. Topics that are the subject of ongoing research in the Advisor's, and their collaborators, group(s) would not be considered acceptable topics. The specific format to be followed for the research proposal may also vary and the candidate must first discuss expectations with the Advisor. These expectations will be communicated by the Advisor to, and approved by, the Dissertation Committee. Minimally, the proposal should contain sections including Introduction, Specific Aims, Background, Research Plan, Expected Results and Discussion of possible pitfalls and remedies. The minimum number of pages will be stipulated by the Advisor but the maximum number of pages should not exceed 15 double-spaced pages. Proposals of 10-15 pages would be considered the norm. Complete references are to be included and are exclusive of the minimum/maximum proposal pages stipulated above. The student should provide a copy of the Original Research Proposal Evaluation Form (see **Appendix** to this Handbook for all the necessary forms) to each member of the Dissertation Committee. This includes the Advisor, who normally acts as the Chair of the Committee. Within 3-4 weeks after the receipt of the proposal, the Chair of the Committee will inform the candidate if he/she (a) passed, (b) needs to modify and resubmit the proposal, incorporating

the suggested revisions by the Committee members, (c) needs to present the proposal orally, or (d) has to write a different research proposal altogether and repeat the process. The Chair of the Committee (Advisor) will inform the Graduate Program Director in writing when this requirement has been satisfactorily completed.

## **Stage 5: Final Dissertation Defense**

### ***(a) Residency Requirement***

Per Graduate School mandate, after Advancement-to-Candidacy, the student is required to spend at least a year in residence to fulfill his/her thesis research requirements before Final Dissertation Defense.

### ***(b) Appointment of Final Dissertation Defense Committee***

In conformity to the policy of the Graduate School, nominations for membership (see <http://www.umbc.edu/gradschool/gradcatalog/requirements.html>) on the Committee will be officially submitted to the Graduate School by the student's Research Advisor at least *six months prior to the date of the final examination* on the Nomination of Members for the Final Dissertation Examination Committee form. At least *three* of the five members are expected to be regular members of the graduate faculty. Members external to UMBC must hold a doctorate degree and normally are distinguished scholars in the general field of the dissertation in question. A curriculum vitae for any outside member(s) must accompany the Nomination of Members form. The candidate's Dissertation Committee will normally serve as the Final Dissertation Committee.

The Advisor and two Readers will be identified on the nomination form. The time and place of the examination will be established by the Advisor, who will also serve as Chair of the Dissertation Committee. The Dean of the Graduate School will appoint the final examination committee and notify the Advisor of the approved committee. One member of the committee will be designated by the Dean of Graduate School as his or her own representative.

## **Ph.D. Progression Checklist and the Required Forms to be Completed**

*(see Appendix to this Handbook for all the necessary forms)*

<b>Submit to</b>	<b>When</b>	<b>Required Forms</b>	√
Dept.	By the end of second semester	Research Interviews, Rotations, and Mentor Selection Form	
Dept.	By the end of third semester	Dissertation Committee Members Form	
Dept.	By the end of third semester	Levels of Progression Form indicating CHEM 690 Seminar and Literature Review CHEM 720 have been completed	
Grad. Sch.	Completion of all requirements for candidacy; no later than two (2) full sequential semesters (Spring, Summer or Fall) before the scheduled date of dissertation defense	"Application for Admission to Candidacy for the Doctoral Degree"	
		"Graduate School Record"	
Grad. Sch.	Six (6) months before the date of Dissertation Defense	"Nomination of Members for The Final Doctoral Examination Committee"	
Grad. Sch.	Two (2) weeks prior to the final Dissertation Defense	"Certification of Readiness to Defend the Doctoral Dissertation"	
		"Announcement of Ph.D. Dissertation Defense"	
Grad. Sch.	Within twenty four (24) hours of final Dissertation Defense	"Report of Examining Committee on Doctoral Dissertation or Master's Thesis"	
Grad. Sch.	By the announced date for the semester in which you graduate	"Application for Diploma"	

### **M.S. Program (Thesis Option)**

The stages of progression toward a Master's degree and the timeline for completion of each stage are shown in a tabular form below for easy reference. The detailed descriptions of each stage follow the table.

**Table II: Progression Milestones for an M.S. Degree with Thesis Option**

Year	Semester	Activities
1	1	Core Courses + CHEM 714 + Lab Rotations (CHEM 602)
	2	Core/Elective Course + CHEM 690 + CHEM 714 + Choosing an Advisor
2	3	Elective Courses + CHEM 720 + Research (CHEM 799)
	4	CHEM 600 + Research (CHEM 799) + Final Thesis Defense

#### **(a) Coursework**

A minimum of thirty (30) credits required.

- All common-core first-year requirements (see Ph.D. Program description above for details) including CHEM 602/CHEM 714.
- Complete *three* out of the *five* basic core courses.
  - This requirement may also be fulfilled by completing equivalent courses or by passing appropriate written examinations. Equivalence of courses must be approved by the Graduate Committee.
  - Students concentrating in Biochemistry enroll in CHEM 632 as part of the three core requirements. (**Note:** for year 2016-17, they will enroll in CHEM 437 instead).
- At least eighteen (18) credits of courses at the 600 level or higher with the approval of the research advisor and Dissertation committees.
  - All students must register for CHEM 690 for 1 credit during the *second* semester of study in the graduate program.
  - All students must also register for CHEM 600 (Advanced Laboratory Project) for two (2) credits during the *fourth* semester of study in the graduate program.
  - Students concentrating in Biochemistry must enroll in CHEM 638 as one of the electives.
  - Core course requirements at the 600 level or higher may be used as part of the 18 credits.
- CHEM 720, Critical Assessment of Scientific Literature
- Six (6) credits of CHEM 799, Master's Thesis Research.
- Final Thesis Defense

**(b) Research**

The aim of the Master's program is to provide students with an appreciation and mastery of the tools and methodology of research to enable them to function at a level greater than that can be expected of a person at the B.S. level. All Master's candidates with thesis option are required to complete a research project. This project will be a new investigation that results in a thesis with publishable results. Each student's Master's program will be developed in conjunction with the student and the major advisor.

***(c) Appointment of Examination Committee and the Final Thesis Defense***

The final oral examination of the thesis is conducted by an examining committee appointed by the Dean of the Graduate School. Nominations for membership on the committee are submitted to the Dean of the Graduate School by the student's advisor two months before the planned date of the defense. The examining committee will consist of a minimum of three (including the chair) and a maximum of five voting members, three of whom will be members of the graduate faculty. One member of the committee may be a scholar in the field of the thesis from another institution or another component of the University of Maryland. The dean will appoint a Graduate School representative.

The student's advisor, who must be a member of the graduate faculty, chairs the committee. The chairperson is informed of the approval of the nominated examining committee by the Dean of the Graduate School. The chairperson of the committee then selects the time and place for the examination and notifies the other members of the committee and the candidate. The candidate must distribute the thesis to all members of the committee at least 10 working days before the date of the scheduled examination. The Thesis Committee Chairperson and the Graduate Program Director will certify to the Graduate School that the thesis is defensible by filing the Certification of Readiness to Defend the Master's Thesis form at least two weeks prior to the final examination.

### **M.S. (Thesis) Progression Checklist and the Required Forms to be Completed**

*(see Appendix to this Handbook for all the necessary forms)*

<b>Submit to</b>	<b>When</b>	<b>Required Forms</b>	√
Dept.	By the end of second semester	Research Interviews, Rotations, and Mentor Selection Form	
Dept.	By end of third semester	Graduate Student Advisory Committee form	
Grad. Sch.	Two (2) months before the date of final Thesis Defense	"Nomination of Members for the Final Master's Examination Committee"	
Grad. Sch.	At the beginning of the semester of anticipated graduation	"Fulfillment of Course Requirements for Master's Degree"	
Grad. Sch.	At the beginning of the semester of anticipated graduation	"Certification of Completion of Master's Degree Requirements"	
Grad. Sch.	Two (2) weeks prior to the final Thesis Defense	"Certification of Readiness to Defend the Master's Thesis"	
Grad. Sch.	Within twenty four (24) hours of final Thesis Defense	"Report of Examining Committee on Doctoral Dissertation or Master's Thesis"	
Grad. Sch.	By the announced date for the semester in which you expect to graduate	"Application for Diploma"	

### **M.S. Program (Non-Thesis Option)**

The stages of progression toward a Master's degree and the timeline for completion of each stage are shown in a tabular form below for easy reference. The detailed descriptions of each stage follow the table.

**Table III: Progression Milestones for an M.S. Degree with Non-Thesis Option**

Year	Semester	Activities
1	1	Core Courses + CHEM 714
	2	Core/Elective Courses + CHEM 690 + CHEM 714 + Choosing an Advisor
2	3	Additional Elective Courses + CHEM 720
	4	Additional Elective Course + CHEM 600

#### **(a) Coursework**

- A minimum of thirty (30) credits is required.
  - The non-thesis option will require additional course work in lieu of CHEM 799 to make up to 30 credits.
- All common-core first-year requirements including CHEM 690/ CHEM 714.
- Complete three out of the five basic core courses.
  - This requirement may also be fulfilled by completing equivalent courses or by passing appropriate written examinations. Equivalence of courses must be approved by the Department.
  - Students concentrating in Biochemistry enroll in CHEM 632 as part of the three core requirements. (**Note:** for year 2016-17, they will enroll in CHEM 437 instead).
- At least twenty (20) credits of courses at the 600 level or higher (apart from CHEM 690) with the approval of the Non-thesis Master's Committee:
  - Students concentrating in Biochemistry must enroll in CHEM 638 as one of the electives.
  - Core course requirements at the 600 level or higher may be used as part of the 20 credits.
- Two credits of CHEM 600, Advanced Laboratory Projects, as part of the required 30 credits.
  - Arrangements are to be made with a faculty mentor in an area of research interest, who will become the advisor of the M.S. student.

- CHEM 720, Critical Assessment of Scientific Literature: All non-thesis M.S. students are required to present either a scholarly paper or a seminar indicating the student's familiarity with an area of modern chemical research for approval by the Departmental Non-Thesis Master's Committee.
- The Department has a Non-Thesis Master's Committee, which will provide assistance to the student in navigating program requirements.

***(b) Research Experience***

The aim of the Master's program with non-thesis option is to provide students with an appreciation and mastery of the tools and methodology of research to enable them to function at a level greater than can be expected of a person at the B.S. level. All Master's candidates are required to acquire some research experience. This experience will be culminated by either a scholarly paper or seminar indicating the student's familiarity with an area of modern chemical research. Each student's Master's program will be developed in conjunction with the student and the major advisor.



**M.S. (Non-Thesis) Progression Checklist and the Required Forms to be Completed**

*(see Appendix to this Handbook for all the necessary forms)*

<b>Submit to</b>	<b>When</b>	<b>Required Forms</b>	√
Dept.	By the end of second semester	Research Interviews, Rotations, and Mentor Selection Form (Non-thesis students exclude the rotation section of the form).	
Grad. Sch.	At the beginning of the semester of anticipated graduation	"Fulfillment of Course Requirements for Master's Degree"	
Grad. Sch.	At the beginning of the semester of anticipated graduation	"Certification of Completion of Master's Degree Requirements"	
Grad. Sch.	By the announced date for the semester in which you expect to graduate	"Application for Diploma"	

## **Teaching Assistantship Responsibilities**

Graduate **Teaching Assistants (TA's)** are valuable members of the academic community. **TA's** are employed by the Department for the purpose of assisting faculty members in the teaching of courses. TA responsibilities may include leading recitation/discussion sessions, supervising laboratories, doing classroom demonstrations, grading (e.g., homework, exams, and/or papers), tutoring, and holding office hours. Other duties may involve working in the stockroom, operating departmental instrumentation, or functioning as a technician. In exchange for these duties, a **TA** is awarded a stipend, tuition remission for up to ten credits per semester for a full-time **TA**, and health benefits.

**Teaching Assistants** are obligated to work for up to 20 hours per week, which includes time spent in grading, having office hours, etc., in addition to the actual time spent in teaching or doing some other assigned responsibility. If you need to miss a day of your assignment, it is your responsibility to inform the instructor to whom you report so that an *instructor-approved replacement* can be made as soon as possible. As a **TA**, you are accountable to your faculty instructor and to your students. It is necessary for you to be *professional at all times*.

In accepting the position of **TA**, you take on the responsibility of being a teacher and a role model to others (e.g., undergraduates). The importance of teaching responsibilities assigned to graduate students cannot be overstated, and serious consideration is given by the Department to the development and training of **TA's**. Training may be formalized in weekly meetings held by your course instructor or may take the shape of mentoring students on a one-to-one basis. Teaching expertise represents a set of skills and attitudes that is often acquired through experience. Departmental **TA's** are monitored by their faculty mentor, who will provide ongoing guidance and evaluation. Being a **TA** is an opportunity to gain knowledge from individuals that have devoted their lives to educating others, and to explore teaching as a possible goal in your own future.

## **Semester Responsibilities**

These items are the required submissions by all graduate students to maintain good standing in the department.

### **Advisement Form**

- to be completed and signed by your advisor before the remission of tuition form may be processed.

### **Remission of Tuition Form**

- you must be registered for courses in order to sign your form which will then be processed to the Graduate School.

### **Graduate Assistant Health Insurance Enrollment Form**

- to be completed with your current mailing address, e-mail address, and signature.

### **Graduate Assistant Statement of Completion of Duties Form**

- to be completed and signed by your advisor at the end of each semester. The maximum number of sick days and vacation days that you are allowed to take per year (as defined by UMBC Graduate School) is 10 days and 10 days, respectively.

## **Yearly Responsibilities**

### **Graduate Assistantship Agreements**

- to be completed once a year, usually in July.
- The agreement is sent to the Graduate School to authorize the process of the remission of tuition and GA health insurance enrollment forms.

### **Annual Doctoral Student Status Report**

- to be completed once a year, usually in July.

## **Policy And Procedures For Student Academic Misconduct**

University of Maryland Graduate School, Baltimore

This document sets out the basic University of Maryland Graduate School, Baltimore policy and procedures for dealing with the various forms of student academic misconduct primarily in course work. Such misconduct involves significant breaches of integrity which may take numerous forms such as, but not limited to, those listed below:

- Fabrication: The intentional and unauthorized generation or altering of data, information, citation, or result in an academic exercise.
- Falsification: The intentional and unauthorized altering of any information, citation, or result in an academic exercise.
- Plagiarism: The intentional or knowing representation of the words, ideas, or work of others as one's own in an academic exercise. The appropriation of the language, ideas, or thoughts of another and representation of them as one's own original work.
- Cheating: The intentional or attempted use of unauthorized material in an academic exercise.
- Improprieties of Authorship: Improper assignment of credit or misrepresentation of material as original without proper referencing of the original authors.
- Facilitating Academic Dishonesty: The intentional or knowing assistance or attempted assistance of another student to commit an act of academic misconduct.

Student misconduct in research and scholarly work falls under the purview of the University of Maryland Baltimore County document, "Policy and Procedures Concerning Misconduct in Scientific Work," or the University of Maryland Baltimore document, "Policy and Procedures Concerning Misconduct in Scholarly Work."

All graduate students of the UMGSB are subject to the standards of academic integrity required by the UMGSB and standards of academic integrity specific to a graduate program approved by the Graduate School. For example, the Masters in Science Nursing programs have additional standards. Students are also subject to the possible penalties for academic misconduct described in this document. Students must also observe any additional standards announced by faculty members for particular courses.

Each faculty member is responsible for maintaining academic integrity in his or her courses and has the authority, using proper procedures and reasonable judgment, to determine whether a student has engaged in academic misconduct. The faculty member must decide whether the misconduct involves a less-serious infraction susceptible to resolution by informal methods or a more-serious infraction requiring severe and stigmatizing penalty, such as suspension or expulsion. Once the faculty member has made an initial determination of academic misconduct, he or she shall initiate the process explained below. The faculty member should make initial determination of academic misconduct within two weeks of the infraction, if possible, and the entire process should be completed within 90 days, if feasible.

### **I. Less-Serious Infractions**

Examples of infractions that can be considered less serious are:

- minor instances of plagiarism or cheating on examinations or papers required for a course
- minor fabrication or falsification of data for a laboratory report for a course
- facilitating academic dishonesty by students in an academic exercise

After identifying academic misconduct and providing written notification and obtaining written authorization from the Associate Dean or the Dean's Designee, the faculty member has authority to resolve less serious cases of academic misconduct by means of informal methods such as warning, counseling, additional assignments, or grading. A typical penalty that has been exacted has been to assign a zero grade for the exercise and to compute the course grade including the zero grade for the exercise. The student may be reprimanded by the instructors, and the Graduate School can send letters of reprimand with the threat of dismissal should there be further occurrence. Such informal methods shall not be considered to be severe or stigmatizing. Confidential records of authorized informal actions shall be kept by the Associate Dean or the Dean's Designee for use of the Graduate Council Grievance Committee\*. The GCGC may release only general statistical summaries of such information and may not release identifying information.

Having made an initial determination of academic misconduct involving a less serious infraction and having consulted the Associate Dean or the Dean's Designee for authorization, the faculty member shall observe certain rights of the student: the faculty member shall notify the student in writing within five days, if feasible, of the initial determination of academic misconduct and shall provide the student an opportunity within five days of notification to give explanation. Should the student fail to offer an explanation within the time frame, seek an extension for a good faith reason, or make a written request to the Associate Dean or the Dean's Designee for a full hearing before the GCGC, the informal action shall become final.

The faculty member's informal action shall be final and conclusive and not subject to appeal within the University System of Maryland on grounds related to academic misconduct.

## II. More-Serious Infractions

Infractions that can be considered as more serious include:

- major instances of plagiarism or cheating on examinations or papers for a course
- fabrication or falsification of data for publication, thesis, or dissertation
- a pattern of, or repeated occurrences of, less-serious infractions

Having made a final determination of more-serious academic misconduct, the faculty member shall notify the student in writing within five days, if feasible. The student shall have an opportunity within 10 days to respond and give an explanation to the faculty member before the determination of more serious academic misconduct can be made final by the faculty member.

After making an initial determination of an instance of more-serious academic misconduct requiring severe and stigmatizing penalty, the faculty member shall within five days send a letter to the Associate Dean or the Dean's Designee. The faculty member's letter shall describe the academic misconduct and recommending suspension, probation, expulsion, or

other action commensurate with the seriousness and circumstances of the misconduct. The faculty member shall send a copy of the letter to the student, to the graduate program director, and to the department chair. The Associate Dean or the Dean's Designee will notify the registrar, if appropriate, to prevent the student from dropping the course, thereby evading a penalty. The letter to the student shall include a copy of this policy. The faculty member shall also make reasonable efforts to preserve any evidence that might be needed by the GCGC in the event of an appeal by the student.

### III. Appeals and Hearings

When the faculty member has filed with the Associate Dean or the Dean's Designee a letter establishing academic misconduct requiring severe or stigmatizing penalty, the student shall have the right to a hearing before the GCGC. The student must file a written request for a hearing with the Associate Dean or the Dean's Designee within 10 days of notification. When a student requests a hearing in a case involving severe or stigmatizing penalty, the UMGSB administration shall provide facilities and personnel requested by the chair of the GCGC for the purpose of providing due process. If the faculty member recommends suspension or expulsion, the GCGC shall (unless the student waives the right to a hearing) automatically conduct a hearing to determine if there is enough evidence of misconduct, or history of misconduct, to justify suspension or expulsion.

Upon its notification of a hearing request, the Dean of the Graduate School will appoint a three-person committee from among members of the GCGC. The GCGC should conduct an investigation, gather evidence, and interview witnesses to determine the facts. The investigation shall include a statement from the faculty member, describing the situation and action, a statement from the student including reason for the hearing request, and all statements by witnesses. The Associate Dean or the Dean's Designee shall circulate the statements to GCGC members, noting that confidential items must be kept in a secure location. The GCGC shall also obtain any additional information requested by the faculty member, the student, or the committee members. If requested by the chair of the GCGC, the Associate Dean or the Dean's Designee shall provide the GCGC the record of academic misconduct of any student requesting a hearing. The GCGC should, if necessary, hold a pre-hearing meeting of committee members to discuss the investigation. Copies of all items of evidence should be sent to the faculty member and the student or, if the evidence cannot be copied, the Associate Dean or the Dean's Designee should arrange for the evidence to be inspected by these parties at a convenient time.

The GCGC shall then schedule a hearing, conducted by the chair of the GCGC, allowing sufficient time, including continuations if necessary, for the committee to be satisfied that further inquiry would turn up no new material. If feasible, the hearing should be scheduled within 30 days of the GCGC's notice of a hearing request. At least three members of the GCGC must attend a hearing to form a quorum. Hearings will be held in closed session and will be tape recorded. Accidental erasure of the tapes, failure of the recording equipment, or poor quality of the recording will not be grounds for appeal. The faculty member and the student shall attend the hearing. Witnesses may be present at the hearing only during their own testimonies except with the permission of both the student and the chair of the GCGC. Legal counsel for the student or the university may be present at the hearing in an advisory role. Legal counsel shall not function as an advocate. The student shall have the right to state his or her case, to offer explanations and interpretations of each item of evidence and

testimony, and to ask questions of the faculty member and witnesses. The faculty member may offer interpretations of the evidence and testimony and ask questions as necessary. Each committee member may ask questions. The proceedings of the hearing are to be confidential and are not to be discussed outside the hearing.

Those members of the GCGC who were present throughout the hearing shall discuss the case in closed session as soon as possible after the conclusion of the hearing. They then vote whether to uphold the faculty member's initial determination of academic misconduct. When a faculty member's recommendation of suspension or expulsion is involved, the GCGC also votes whether to uphold the recommendation. No votes in absentia shall be counted.

The GCGC shall send its findings and recommendations in writing to the Associate Dean or the Dean's Designee within 10 days of the hearing, if possible. (A dissenting opinion may be submitted and filed by any GCGC member.) The Associate Dean or the Dean's Designee will act upon the recommendations of the report and notify the student, the faculty member, and other necessary parties of the results of the determination. If the GCGC determines that the faculty member acted improperly or mistakenly in his or her initial determination of more serious academic misconduct, it may recommend that the Associate Dean or the Dean's Designee expunge the notice of academic misconduct or attach a letter of explanation to the notice. The GCGC may, in its report to the Associate Dean or the Dean's Designee, include other penalties. While the GCGC may not impose grade alterations based on the content of the student's work, it has the authority to uphold the grade sanctions recommended by the faculty member if the student is found to have engaged in academic misconduct. The Associate Dean or the Dean's Designee's notification letter shall direct the student to the Dean of the Graduate School should he or she want to appeal the decision. The GCGC shall also send the Dean of the Graduate School the various documents and records used as evidence in the case.

The student has the right to appeal to the Dean of the Graduate School. The appeal must be in writing and must be filed within 10 days of receiving the GCGC report. The Dean will review the GCGC report and may uphold the decision, reverse the decision, modify the decision or penalties, or refer the case back to the GCGC. In any case, the decision of the Dean of the Graduate School is final.

The Dean of the Graduate School shall maintain a confidential file of academic misconduct communications which shall constitute the student's record of academic conduct. The Dean of the Graduate School may place appropriate notations on the student's transcript and provide the academic misconduct record of any student to outside institutions making inquiry appropriate under the federal Buckley Amendment laws.

\*The GCGC is composed of three graduate faculty members from each campus, University of Maryland Baltimore and University of Maryland Baltimore County. GCGC members may be members of the Graduate Council and are appointed by the respective deans of the Graduate School to a term of two years. The initial appointment of one year for two members assures continuity of membership on the committee. Monthly meeting times will be set for the GCGC and any grievances that are filed will be heard at these times. Additional meeting times may be scheduled as needed. When a grievance is filed, all parties of the grievance and the members of the GCGC will be asked if there would be a conflict of interest with members of the committee or with any party filing the grievance. The Dean of the Graduate School will select three members of the GCGC who have no conflict

of interest with any party affected by the grievance to serve on a panel to hear the case. Two members of the panel will be from the campus of the person filing the grievance. A panel may be augmented by two Graduate Student Association members of the Graduate Council (or other selected students) for the deliberation of academic misconduct grievances. The GCGC panel will serve as an informal fact-finding body, taking written statements from all participants and interviewing witnesses. The investigation may take the form of a hearing in which statements from all participants may be reviewed and the participants questioned. Legal counsel may be present at the hearing in an advisory role, but shall not function as an advocate. Every consideration will be taken to insure the confidentiality of witnesses. The GCGC panel will deliberate in closed session and make its recommendations to the Associate Dean or the Dean's Designee. Original documents of the proceedings and records of the hearing will also be submitted to the Associate Dean or the Dean's Designee.

(Approved and adopted by the Graduate Council, September 1993; revised July 23, 1998; revised Nov. 25, 2002.)



# **APPENDIX**

## **The Required Departmental and Graduate School Forms**

***Official Graduate School Forms can be downloaded from the following URL:***

<http://gradschool.umbc.edu/students/forms/>

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# DEPARTMENT OF CHEMISTRY AND BIOCHEMISTRY

## GRADUATE STUDENT RESEARCH PROGRESSION: RESEARCH INTERVIEWS, ROTATIONS, AND MENTOR SELECTION

*DIRECTIONS: Upon completion of the interview and rotation plan portion of this form, please turn in a "copy" of the form to the Graduate Program Director. Upon completion of the final selection of your research mentor, please turn in the "original" signed form for your graduate record file. Thank you.*

**STUDENT'S NAME:** \_\_\_\_\_ **SEMESTER:** \_\_\_\_\_

**DISCIPLINE:** \_\_\_\_\_ **DEGREE:** \_\_\_\_\_

### Interviews:

First year students are expected to interview with at least three faculty members with whom they are interested in doing research. In the spaces below fill in the faculty name and have faculty initial upon completion of the interview.

_____	_____	_____
Faculty Name	Initials	Date
_____	_____	_____
Faculty Name	Initials	Date
_____	_____	_____
Faculty Name	Initials	Date

### Proposed Rotation Plan (place in order of preference):

The student should then propose a research rotation plan to the Graduate Committee via this form, identifying laboratories in which he/she will complete the research rotations (eight to ten weeks, respectively). The proposed research rotation plan should be initiated in the first semester. The student is encouraged to do two to three research rotations with the eventual selection of a mentor no later than the end of the second semester into the graduate program.

Preference	Faculty Mentor	Approx. Starting Date	Date of Completion	CHEM 602 Credit	Faculty Initials
1					
2					
3					

Upon selection and consent of the chosen faculty mentor, and after consultation by the mentor with, and approval by, the Department Chair, the student should complete the following portion of the form for inclusion in their permanent graduate record.

### FACULTY RESEARCH MENTOR

**I hereby notify the Chemistry Graduate Committee that I will be completing my thesis research with the following faculty mentor:**

**Student Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Faculty Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Chair Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**DEPARTMENT OF CHEMISTRY AND BIOCHEMISTRY  
UMBC**

**GRADUATE STUDENT ADVISORY COMMITTEE  
(DISSERTATION/THESIS COMMITTEE)**

***DIRECTIONS:*** The selected Advisory (Dissertation/Thesis) Committee will evaluate the student's progression toward successful completion of degree requirements. (See guidelines under appropriate (Ph.D./M.S.) heading for composition of each Committee Membership). ***For your graduate record file, please complete the information requested below and turn in the form to the Chemistry Office no later than the end of the third semester of study.***

**STUDENT'S NAME:** \_\_\_\_\_ **DEGREE:** \_\_\_\_\_

**DISCIPLINE:** \_\_\_\_\_ **CHEMISTRY** \_\_\_\_\_ **SUB-DISCIPLINE** \_\_\_\_\_

\_\_\_CBI\*

COMMITTEE MEMBERS	
NAME	SUB-DISCIPLINE
Committee Chairperson:	
1.	
2.	
3.	
4.	
5.	

\* CBI students must have a Biology faculty member on their Committee.

## Chemistry Graduate Program Levels of Progression

STUDENT'S NAME: \_\_\_\_\_

PROGRAM:                      Ph.D.        \_\_\_\_\_                      M.S.        \_\_\_\_\_

**1. CHEM 690 Seminar:**

Date passed:    \_\_\_\_\_

**2. Literature Review**

Date passed:    \_\_\_\_\_

**3. Advancement to Candidacy Examination** (Graduate School forms need to be completed as well):

Date passed:    \_\_\_\_\_

**4. Original Research Proposal:**

Date passed:    \_\_\_\_\_

**5. Final Dissertation Defense** (all required forms from Graduate School must be completed as well):

Date passed:    \_\_\_\_\_

Faculty Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## Original Research Proposal Evaluation Form

Title of the Proposal: Name of the Candidate: Name of the Faculty Advisor: Name of the Faculty Reviewer: <div style="text-align: center; margin-top: 10px;">How Do You Rate the Proposal in Each of the Following Categories?</div>					
Criteria	Scale (1=Best and 5=Worst)				
	1	2	3	4	5
Originality & Significance					
Innovation					
Presentation					
Approach & Feasibility					
Overall					
A Brief Narrative Including Strengths & Weaknesses and Suggestions for Improvement					
<b>Final Recommendation</b>					
Straight Pass	Provisional Pass with Revision	Oral Examination Before Decision	Fail Submit A New Proposal		



# THE GRADUATE SCHOOL AT UMBC

## APPLICATION FOR ADMISSION TO CANDIDACY FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

1. Copies of each form should be retained by the student and Graduate Program Director.
2. Forward this application (2 pages) to the Graduate School, Administration Building 214A.

Name: (last, first, M.I.) <input type="checkbox"/> Mr. <input type="checkbox"/> Ms.		Student ID: _____
Current Address: _____		
E-mail: _____	Home Phone: _____ - -	Work Phone: _____ - -
Graduate Program: _____		899 Section Number: _____
Dissertation Working Title or Topic: _____		
<input type="checkbox"/> I CERTIFY THAT I HAVE COMPLETED THE RESPONSIBLE CONDUCT OF RESEARCH TRAINING.		

Endorsement of this application and its unconditional approval by the Graduate School indicates:

- (1) that the applicant's undergraduate training has been substantially equivalent to that required for the corresponding first degree of this University.
- (2) that, in the opinion of the applicant's professors and the Graduate School, the applicant has the necessary preliminary training and has demonstrated ability for the successful pursuit of graduate study in the applicant's chosen field as required for the degree sought.
- (3) that the course of study described on the accompanying Graduate School Record form has been approved.
- (4) once admitted to candidacy, students will be registered for 9 credits of 899 each semester until graduation.

APPROVAL SIGNATURES			
Please type and sign			
Advisor:	Signature: _____	E-mail: _____	Date: _____
Co-Advisor:	Signature: _____	E-mail: _____	Date: _____
Graduate Program Director:	Signature: _____		Date: _____
Graduate School: Lisa P. Morgan	Signature: _____		Date: _____

# GRADUATE SCHOOL RECORD FORM

- Name: \_\_\_\_\_  
                     *last*          *first*          *middle initial*

***bottom.***

page 2

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University of Maryland Graduate School, Baltimore

**NOMINATION OF MEMBERS  
FOR THE FINAL DOCTORAL DISSERTATION  
EXAMINATION COMMITTEE**

**DOCTORAL EXAMINATION COMMITTEE:**

1. Must be filed with the Graduate School six months prior to the final doctoral examination.
2. The Chairperson must be a REGULAR member of the UMGSB Graduate Faculty.
3. There will be a minimum of five (5) members on the Final Examination Committee (including the Chair), of whom at least three (3) must be REGULAR members of the UMGSB Graduate Faculty. All members must hold the doctorate degree.
4. At least one (1) individual must be from outside the candidate's department or program.
5. Two members of the doctoral committee must be designated READER by an asterisk (\*) following their names. The Chairperson may not be counted as a reader.
6. *For non-members a Curriculum Vitae must be attached.*

STUDENT NAME (LAST, FIRST, M.I.)	STUDENT ID	PROGRAM CODE

The following individuals are nominated to serve on the final DOCTORAL examination committee for this student. The undersigned asserts that, to the best of their knowledge, no nominee has an actual or apparent conflict of interest pursuant to the UMBC Policy on Conflicts of Interest on Graduate Student Final Examination Committees.

The proposed examination date is \_\_\_\_\_

NOMINEES (Include Committee Chair)	DEPARTMENT	GRADUATE FACULTY MEMBERSHIP Regular – Associate –Special Non-Member (Attach brief CV)
1.		Select
2.		Select
3.		Select
4.		Select
5.		Select
6.		Select

APPROVAL SIGNATURES		
Please type and sign		
Committee Chairperson:	Signature:	Date:
Committee Co-Chairperson:	Signature:	Date:
Graduate Program Director:	Signature:	Date:
Student:	Signature:	Date:
Associate Dean: Robert H. Deluty, Ph. D.	Signature:	Date:
Dean's Representative: For Graduate School Use Only		

Revised by San Aung on 02/08/13

1034 – 015 & 1034 – 016



THE GRADUATE SCHOOL AT UMBC

**CERTIFICATION OF READINESS TO DEFEND  
THE DOCTORAL DISSERTATION**

(to be filed with the Graduate School at least two weeks prior to the final examination)

Date: \_\_\_\_\_

To: Dean of the Graduate School

From: \_\_\_\_\_  
Dissertation Chair Program

The undersigned members of the student's Doctoral Examination Committee hereby certify that the dissertation written by

\_\_\_\_\_  
Student's Name: (Last, First, M.I.) Student ID

entitled

is ready to be defended.

APPROVAL SIGNATURES		
Please type and sign		
Dissertation Committee Chairperson:	Signature:	Date:
Dissertation Committee Co-Chairperson:	Signature:	Date:
Dissertation Reader: (1)	Signature:	Date:
Dissertation Reader: (2)	Signature:	Date:
Graduate Program Director:	Signature:	Date:

Date of Final Examination: \* \_\_\_\_\_  
Month / Day / Year

\* The examination committee must be permitted sufficient time in which to review the dissertation and return this form to the Graduate School at least two weeks (10 working days) prior to the date of final examination.

Revised by San Aung on 08/01/14

1034 - 010

# University of Maryland Graduate School, Baltimore

## ANNOUNCEMENT OF PH.D. DISSERTATION DEFENSE

Name: <i>(last, first, M.I.)</i>	Program:
Location:	Date and Time:
Dissertation Title:	

### ABSTRACT

If more space is needed please continue on the Announcement of Ph.D. Dissertation Defense Continuation Form.

### DISSERTATION COMMITTEE

All Graduate Faculty members may participate in the defense through invitation of the chair, but only the committee may vote.

Chair's Name:	Chair's Title:
Name:	Title:
Name:	Title:
Name:	Title:
Name:	Title:
Name:	Title:

**Revised 8/28/02**

**1034 - 011**

University of Maryland Graduate School, Baltimore

**NOMINATION OF MEMBERS  
FOR THE FINAL MASTER'S THESIS EXAMINATION  
COMMITTEE**

**MASTER'S EXAMINATION COMMITTEE:**

1. Must be filed with the Graduate School two months prior to the final master's examination.
2. The Chairperson must be a regular or associate member of the UMGSB Graduate Faculty.
3. There will be a minimum of three (3) and a maximum of five (5) members on the final committee (including the chair), of whom at least three (3) must be members of the UMGSB Graduate Faculty. All committee members must hold the highest degree in their discipline.
4. For non-members a Curriculum Vitae must be attached.

☐ **I CERTIFY THAT I HAVE COMPLETED THE RESPONSIBLE CONDUCT OF RESEARCH TRAINING.**

STUDENT NAME (LAST, FIRST, M.I.)	STUDENT ID	PROGRAM CODE

The following individuals are nominated to serve on the final MASTER'S examination committee for this student. The undersigned asset that, to the best of their knowledge, no nominee has an actual or apparent conflict of interest pursuant to the UMBC Policy on Conflicts of Interest on Graduate Student Final Examination Committees.

The proposed examination date is \_\_\_\_\_

NOMINEES (Include Committee Chair)	DEPARTMENT	GRADUATE FACULTY MEMBERSHIP
		Regular – Associate –Special Non-Member (Attach brief CV)
1.		Select
2.		Select
3.		Select
4.		Select
5.		Select
6.		Select

APPROVAL SIGNATURES		
Please type and sign		
Committee Chairperson:	Signature:	Date:
Committee Co-Chairperson:	Signature:	Date:
Graduate Program Director:	Signature:	Date:
Student:	Signature:	Date:
Associate Dean: Robert H. Deluty, Ph. D.	Signature:	Date:
Dean's Representative: For Graduate School Use Only		

Revised by San Aung on 02/08/13

1034 – 015 & 1034 - 016

# University of Maryland Graduate School, Baltimore

## FULFILLMENT OF COURSE REQUIREMENTS FOR MASTER'S DEGREE

\_\_\_\_\_  
Name (last, first, M.I.)

\_\_\_\_\_  
Student ID

Expects to receive a master's degree in the \_\_\_\_\_

program in \_\_\_\_\_  
Month/Year

Thesis Option ☐ / Non-Thesis Option ☐

Advisor \_\_\_\_\_

**List all courses completed for graduate credit at UMBC.** Include research courses and independent study.

Course No	Course Title	Sem./Year	Credits	Grade

If more space is needed please refer to Fulfillment of Course Requirements Continuation Form.

**List courses in which student is currently enrolled.**

Course No	Course Title	Sem./Year	Credits	Grade

**List transfer credits from other institutions accepted towards master's degree.**

Course No	Course Title	Sem./Year	Credits	Grade

### APPROVAL SIGNATURES

Please **type and sign**

Faculty Advisor:	Signature:	Date:
Graduate Program Director:	Signature:	Date:

## FULFILLMENT OF COURSE REQUIREMENTS FOR MASTER'S DEGREE

## Name (last, first, m.i.)

[illegible]



# THE GRADUATE SCHOOL <sup>AT</sup> UMBC

## CERTIFICATION OF COMPLETION OF MASTER'S DEGREE REQUIREMENTS

Name: <i>(last, first, M.I.)</i>	Campus ID:
Type of Masters Degree: Select	Graduation Term and Year: Select 20__
Graduate Program:	

This student has met all requirements of the Graduate School and the program for the degree, including *(please check all that apply)*:

### Completed

- ☐ Thesis Defense
- ☐ Capstone Project
- ☐ Seminars and/or Research Papers
- ☐ Written Comprehensive Examination
- ☐ Oral Comprehensive Examination
- ☐ Language Requirements

- ☐ Student has not completed degree requirements:  
Please withdraw current diploma application.

APPROVAL SIGNATURES		
Please type and sign		
I certify that all requirements for the Master's degree have been or are in process of being satisfied.		
Advisor:	Signature:	Date:
Graduate Program Director:	Signature:	Date:

*\*This form is due the last day of the term for which the student has applied to graduate.*

1034 - 008





(To be filed with the Graduate School two weeks prior to the final examination)

is ready to be defended.

1034 - 009