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
TABLE OF CONTENTS

Important Contact Information................................................................. 4
Departmental Administration & Faculty....................................................... 5
Departmental Instructors......................................................................... 6
Departmental Staff..................................................................................... 7
Expectations & Graduate School Requirements............................................ 8
Admission Requirements.......................................................................... 9
Programs, Committees and Advisements.................................................. 10

Chemistry Ph.D. Program.......................................................................... 11

Stages of Progression............................................................................. 11

Table I. The Progression Milestones for a Ph.D. Degree............................ 11

Stage 1: Completion of Course Requirements & CHEM 690..................... 12
(a) Placement Examinations................................................................. 12
(b) Coursework: Common Core Courses in the First Year........................ 12
(c) Departmental Seminar................................................................. 13
(d) Research Tutorial........................................................................... 13
(e) Research Rotation and Choosing an Advisor.................................... 14
(f) CHEM 690 Seminar During the Second Semester............................ 14
(g) Completion of Additional Coursework Requirements......................... 14

Stage 2: Literature Review...................................................................... 15
(a) Appointment of Dissertation Committee......................................... 15
(b) Completion of Literature Review Requirement.................................. 16

Stage 3: Advancement to Candidacy.......................................................... 16

Stage 4: Original Research Proposal......................................................... 17
TABLE OF CONTENTS (Cont.)

Stage 5: Final Dissertation Defense................................................................. 18

(a) Residency Requirement............................................................................. 18
(b) Appointment of Final Dissertation Defense Committee......................... 18

Ph.D. Progression Checklist and the Required Forms to be Completed........... 19

Chemistry M.S. Program (Thesis Option)......................................................... 20

Table II. Progression Milestones for an M.S. Degree with Thesis Option........ 20

(a) Coursework............................................................................................... 20
(b) Research.................................................................................................... 20
(c) Appointment of Examination Committee and the Final Thesis Defense..... 21

M.S. (Thesis) Progression Checklist and the Required Forms to be Completed... 22

Chemistry M.S. Program (Non-Thesis Option)............................................... 23

Table III. Progression Milestones for an M.S. Degree with Non-Thesis Option... 23

(a) Coursework............................................................................................... 23
(b) Research Experience.................................................................................. 24

M.S. (Non-Thesis) Progression Checklist and the Required Forms to be Completed... 25

Teaching Assistantship Responsibilities.......................................................... 26

Semesterly Responsibilities.............................................................................. 27

Yearly Responsibilities..................................................................................... 27

Policy and Procedures for Student Academic Misconduct............................. 28

APPENDIX - The Required Departmental and Graduate School Forms.............. 33
IMPORTANT CONTACT INFORMATION

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

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
3rd Floor, Administration Building
(410) 455-2288

UMBC GA Health Insurance / University Health Services
Erickson Hall
(410) 455-1556
DEPARTMENTAL ADMINISTRATION & FACULTY

Chair - Rosenzweig, Zeev, Professor
Graduate Program Director - Cullum, Brian M., Associate Professor
Director of Admissions - Kelly, Lisa, Associate Professor
Teaching Assistantship Coordinator - 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
Bush, C. Allen, Professor
Cullum, Brian M., Associate Professor
Daniel-Onuta, Marie-Christine, Assistant 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, Assistant Professor
Rosenzweig, Zeev, Professor and Chair
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
Bush, C. Allen, Professor
Garcin Elsa D., Assistant Professor
Karpe, Richard L., Professor
Kyoung, Minjoung, Assistant Professor
Lu, Wuyuan, Associate Professor
Rosenzweig, Zeev, Professor and Chair
Summers, Michael F., Professor & Investigator, Howard Hughes Medical Institute
Thorpe, Ian, Assistant Professor
Wang, Lai-Xi, Associate Professor

Organic Chemistry

Daniel-Onuta, Marie-Christine, Assistant Professor
Fishbein, James C., Professor
Liebman, Joel F., Professor
Ptaszek, Marcin, Assistant 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 Lecturer

Perks, Mark  - Organic
Carpenter, Tara  - General and Analytical Chemistry

Lecturers

Gierasch, Tiffany  - Tutorial Center Director
Hamilton, Diana  - Collaborative Learning Laboratory
Mang, Stephen  - Analytical and Physical Chemistry Laboratories
Tracy, Allison  - Biochemistry Laboratory
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

Ann Geffert, Program Management Specialist, Chemistry room 109, Ext. 52491, back-up assistant to Chair, backup for purchasing (any office supplies and science supplies), reimbursements, travel coordinator for faculty and graduate students

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, Chemistry room 103, Ext. 51566, 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://www.umbc.edu/gradschool/essentials/proc_academic_integrity.html

Graduate School Policies, Procedures, Forms:
http://www.umbc.edu/gradschool/essentials/procedures.html

Degree Requirements and Deadlines:
http://www.umbc.edu/gradschool/programs/requirements.html

Graduate Tuition and Fees:
http://www.umbc.edu/gradschool/funding/tuition_fees.html
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 (paper-based).

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. All entering Ph.D. and M.S. students who opt to participate in the Summer Bridge program are 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
All entering Ph.D. and M.S. students are assigned a Faculty Advisor from the Graduate Committee who assists in the selection of courses. The Faculty Advisor is only temporary until the student selects a permanent 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**

<table>
<thead>
<tr>
<th>Year</th>
<th>Semester</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td><strong>Core Courses + CHEM 713 + Lab Rotations</strong></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td><strong>Core Courses + CHEM 690 + CHEM 713+ Choosing an Advisor</strong></td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>Appointment of Committee Members + Literature Review + Additional (600-Level) Coursework</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Additional (600-Level) Coursework + Advancement to Candidacy</td>
</tr>
<tr>
<td>3</td>
<td>5</td>
<td>Research in Progress</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>7</td>
<td>Independent Research Proposal, Final Dissertation Defense</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td></td>
</tr>
</tbody>
</table>
Stage 1: Completion of Course 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.
- Placement examinations 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. 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 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 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, Rotation, and Tutorial. These courses are to be taken at the highest level at which they are offered (i.e., 600-level as opposed to 400-level; 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 four out of five basic core* courses.
o Chemical and Statistical Thermodynamics, CHEM 401
o Inorganic Chemistry, CHEM 405
o Comprehensive Biochemistry I, CHEM 437 (Students concentrating in Biochemistry must enroll in CHEM 437 as part of the four core requirements.)
o Mechanisms of Organic Reactions, CHEM 651
o Advanced Instrumental Methods of Analysis, CHEM 661

• All students are required to enroll in 600-level core courses when offered.

*NOTE: 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 core course requirement.

(c) Departmental Seminar

• All first year students must enroll in CHEM 713, Departmental Seminar, both Fall and Spring semesters.
• All first year students are required to attend the seminar even if they are not formally enrolled in it (which could happen should the sum of a semester’s credits of two courses plus CHEM 602 and CHEM 710 equal or exceed 10 credits).
• Only students with a Teaching Assignment conflict will be allowed to defer enrollment in CHEM 713 to the following semester. Attendance on all non-conflict days is still required.

(d) Research Tutorial

• All Ph.D. and M.S. (thesis) students will enroll in CHEM 602 (1 credit), Introduction to Laboratory Research.
• All M.S. (non-thesis) students will enroll in CHEM 600, Advanced Laboratory Projects.
  o Arrangements are to be made with a faculty mentor in an area of research interest.
• All Ph.D. and M.S. students should enroll in CHEM 710, Research Tutorial.
  o CHEM 710 should be taken under the faculty mentor with whom the student is doing CHEM 602.
(e) 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.

- The selection of a dissertation advisor is based upon mutual consent between the concerned student and the faculty member.
- The advisor selection must be completed no later than the end of the second semester into the graduate program.

(f) 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.

(g) Completion of Additional Coursework Requirements
In addition to fulfilling the four 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 601, 602, 690, 713 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.
- 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.

- 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.

**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

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.* 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.

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, with the exception that in the Organic Division the advisor will act as a silent observer. 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 appoint a Chair of the Examining Committee for conducting the oral examination, who will report the results in writing to the Graduate Program Director. 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, and is well on his way toward graduation. While the time frame for completing this requirement may vary from student to student, *it should not be any later than 3 months prior to the final dissertation defense*. The specific format to be followed for the research proposal may also vary, so the candidate must first check with his/her own Advisor in this regard. In the absence of any specific formats required by the Advisor, the following general format is recommended. A copy of an Original Research Proposal, not exceeding 20 double-spaced pages of text plus complete references (not subject to the page limit), *along with a copy of the Original Research Proposal Evaluation Form* (see **Appendix** to this Handbook for all the necessary forms) must be submitted to each member the Dissertation Committee, *including 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)*

<table>
<thead>
<tr>
<th>Submit to</th>
<th>When</th>
<th>Required Forms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dept.</td>
<td>By the end of second semester</td>
<td>Research Interviews, Rotations, and Mentor Selection Form</td>
</tr>
<tr>
<td>Dept.</td>
<td>By the end of third semester</td>
<td>Dissertation Committee Members Form</td>
</tr>
<tr>
<td>Dept.</td>
<td>By the end of third semester</td>
<td>Levels of Progression Form indicating CHEM 690 Seminar and Literature Review have been completed</td>
</tr>
<tr>
<td>Grad. Sch.</td>
<td>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</td>
<td>“Application for Admission to Candidacy for the Doctoral Degree”</td>
</tr>
<tr>
<td>Grad. Sch.</td>
<td>Six (6) months before the date of Dissertation Defense</td>
<td>“Graduate School Record”</td>
</tr>
<tr>
<td>Grad. Sch.</td>
<td>Two (2) weeks prior to the final Dissertation Defense</td>
<td>&quot;Nomination of Members for The Final Doctoral Examination Committee&quot;</td>
</tr>
<tr>
<td>Grad. Sch.</td>
<td>Within twenty four (24) hours of final Dissertation Defense</td>
<td>&quot;Certification of Completion of Doctoral Dissertation&quot;</td>
</tr>
<tr>
<td>Grad. Sch.</td>
<td>By the announced date for the semester in which you graduate</td>
<td>&quot;Report of Examining Committee on Doctoral Dissertation or Master's Thesis&quot;</td>
</tr>
<tr>
<td>Grad. Sch.</td>
<td></td>
<td>&quot;Application for Diploma&quot;</td>
</tr>
</tbody>
</table>
**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**

<table>
<thead>
<tr>
<th>Year</th>
<th>Semester</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>Core Courses + CHEM 713 + Lab Rotations</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Core Courses + CHEM 713+ Choosing an Advisor</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>Additional (600-Level) Coursework + Research</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Final Thesis Defense</td>
</tr>
</tbody>
</table>

(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 710/CHEM 713.
- Complete **four** 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 437 as part of the four core requirements.
- At least eighteen (18) credits of courses at the 600 level or higher with the approval of the research advisor and Dissertation committees.
  - 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.
- 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 Completion of 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)*

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

<table>
<thead>
<tr>
<th>Year</th>
<th>Semester</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>Core Courses + CHEM 713</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>Core Courses + CHEM 713 + Choosing an Advisor</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>Additional 600-Level Coursework + Lab Project</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>Additional 600-Level Coursework + Scholarly Paper Presentation</td>
</tr>
</tbody>
</table>

(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 600/CHEM 710/CHEM 713.
- Complete four 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 437 as part of the four core requirements.
- At least eighteen (18) credits of courses at the 600 level or higher 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 18.
- At least 1 credit of CHEM 600, Advanced Laboratory Projects, as part of the required 30 credits (only 1 credit may be counted towards the degree).
- The Department has a Non-Thesis Master’s Committee, which will provide assistance to the student in navigating program requirements.
- All non-thesis M.S. students are required to present either a scholarly paper or a
(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)

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

**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.
Policy And Procedures For Student Academic Misconduct

University of Maryland Graduate School, Baltimore

This document sets out the basic UMGSB 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:

A. Fabrication: The intentional and unauthorized generation or altering of data, information, citation, or result in an academic exercise.

B. Falsification: The intentional and unauthorized altering of any information, citation, or result in an academic exercise.

C. 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.

D. Cheating: The intentional use or attempted use of unauthorized material in an academic exercise.

E. Improprieties of Authorship: Improper assignment of credit or misrepresentation of material as original without proper referencing of the original authors.

F. 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 UMBC document on "Policy and Procedures Concerning Misconduct in Scientific Work" or the UM,B document on "Policy and Procedures Concerning Misconduct in Scholarly Work."

All graduate students of the University of Maryland Graduate School, Baltimore are subject to the standards of academic integrity required by the UMGSB and to the possible penalties for academic misconduct in course work. 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 and/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 the 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.
Less Serious Infractions

Examples of infractions that can be considered "less serious" are:
- Minor instances of plagiarism or cheating on exams 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 to and obtaining written authorization from the Associate Dean of the Graduate School, 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 commute this 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 for use of the Graduate Council Grievance Committee* (GCGC). 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 for authorization, the faculty member shall observe certain rights of the student: the faculty member shall notify the student in writing within 5 calendar days, if feasible, of the initial determination of academic misconduct and shall provide the student an opportunity within 5 calendar 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 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 on grounds related to academic misconduct.

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, dissertation.
- A pattern of, or repeated occurrences of "less serious" infractions.

Having made an initial determination of more serious academic misconduct, the faculty member shall notify the student in writing within 5 calendar 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 a final determination of more serious academic misconduct requiring severe and stigmatizing penalty, the faculty member shall within 5 calendar days send the Associate Dean of the Graduate School a letter describing 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 will notify the Registrar if appropriate, to prevent the student from dropping the course, thereby evading 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.

**Appeals and Hearings**

When the faculty member has filed with the Associate Dean of the Graduate School 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 within 10 calendar 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 Associate Dean will appoint a three person committee from among the members of the Graduate Council Grievance Committee. This smaller three person committee will hereafter be referred to as the GCGC. The GCGC shall conduct an investigation gathering evidence and interviewing 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 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 committee members. If requested by the Chair of the GCGC, the Associate Dean of the Graduate School 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 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 calendar days of the GCGC's notice of a hearing request. At least 3 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, and/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 testimony except with the permission of both the student and the Chair of the GCGC. Legal counsel for the student and/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 that recommendation. No votes in absentia shall be counted.

The GCGC shall send its findings and recommendations in writing to the Associate Dean of the Graduate School within 10 calendar days of the hearing, if possible. (A dissenting opinion may be submitted and filed by any GCGC member.) The Associate Dean 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 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 of the Graduate School, include other penalties. While the GCGC may not impose grade alterations based on the content of a 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'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 Associate Dean of the Graduate School the various documents and records used as evidence in the case.

The student has the right of appeal to the Dean of the Graduate School. The appeal must be in writing and must be filed within 10 calendar days of receiving the GCGC report. The Dean will review the GCGC report and may uphold the decision, reverse the decision, modify the decision and/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 Associate 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 Associate 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 Graduate Council Grievance Committee (GCGC) is composed of three graduate faculty members from each campus (UM, B and UMBC). 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 Associate Dean 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 members (GSA 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 of the Graduate School. Original documents of the proceedings and records of the hearing will also be submitted to the Associate Dean.

Approved and Adopted by Graduate Council 9/93
Revised to include new GCGC composition 4/95
Revised 7/23/98
APPENDIX

The Required Departmental and Graduate School Forms

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

http://www.umbc.edu/gradschool/essentials/forms.html
Appendix

Table of Contents

Research Interviews, Rotations, and Mentor Selection Form ........................................... 35
Graduate Student Advisory Committee Form ................................................................. 36
Chemistry Graduate Program Levels of Progression Form ............................................. 37
Original Research Proposal Evaluation Form ............................................................... 38
Application for Admission to Candidacy Form .............................................................. 39
Graduate School Record Form ....................................................................................... 40
Nomination of Members of the Final Examination Committee Form ......................... 41
Certification of Completion of Doctoral Thesis Form ..................................................... 42
Announcement of Ph.D. Dissertation Defense Form ....................................................... 43
Continuation Page for Announcement of Ph.D. Defense Form ...................................... 44
Fulfillment of Course Requirements for Master’s Degree Form .................................... 45
Continuation Sheet for Fulfillment of Course Requirements Form ............................... 46
Certification of Completion of Master’s Degree Requirements Form .......................... 47
Certification of Completion of Master’s Thesis Form ..................................................... 48
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 Chemistry Office. 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: __________

First year students are expected to interview with at least three faculty members with whom they are interested in doing research. The student should then propose a research rotation plan to the Graduate Committee via this form. Preferably by December 1st but not later than January 2nd, the student will select a laboratory, in which he/she will do a research rotation (six to eight weeks), to be initiated on January 7th at the latest. The student is encouraged to do two to three research rotations with the eventual selection of a mentor by the summer following admission. In the spaces below fill in the faculty name and have faculty initial upon completion of the interview.

Interviews:

<table>
<thead>
<tr>
<th>Faculty Name</th>
<th>Initials</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Proposed Rotation Plan (place in order of preference):

<table>
<thead>
<tr>
<th>Preference</th>
<th>Faculty Mentor</th>
<th>Approx. Starting Date</th>
<th>Date of Completion</th>
<th>CHEM 602 Credit</th>
<th>Faculty Initials</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Upon selection and consent of the chosen faculty mentor, and after consultation by the mentor with, and approval by, 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: __________________
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*

<table>
<thead>
<tr>
<th>COMMITTEE MEMBERS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NAME</strong></td>
</tr>
<tr>
<td>Committee Chairperson:</td>
</tr>
<tr>
<td>1.</td>
</tr>
<tr>
<td>2.</td>
</tr>
<tr>
<td>3.</td>
</tr>
<tr>
<td>4.</td>
</tr>
<tr>
<td>5.</td>
</tr>
</tbody>
</table>

* 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: ______

37
# Original Research Proposal Evaluation Form

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Scale (1=Best and 5=Worst)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Originality &amp; Significance</td>
<td></td>
</tr>
<tr>
<td>Innovation</td>
<td></td>
</tr>
<tr>
<td>Presentation</td>
<td></td>
</tr>
<tr>
<td>Approach &amp; Feasibility</td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td></td>
</tr>
<tr>
<td>A Brief Narrative</td>
<td></td>
</tr>
<tr>
<td>Including</td>
<td></td>
</tr>
<tr>
<td>Strengths &amp; Weaknesses and</td>
<td></td>
</tr>
<tr>
<td>Suggestions for Improvement</td>
<td></td>
</tr>
</tbody>
</table>

**Final Recommendation**

<table>
<thead>
<tr>
<th></th>
<th>Straight Pass</th>
<th>Provisional Pass with Revision</th>
<th>Oral Examination Before Decision</th>
<th>Fail</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Submit A New Proposal</td>
</tr>
</tbody>
</table>
Univer
sity of Maryland Graduate School, Baltimore

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 208.

<table>
<thead>
<tr>
<th>Name: (last, first, M.I.)</th>
<th>Student ID.:</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Mr. ☐ Ms.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Current Address:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>E-mail:</th>
<th>Home Phone:</th>
<th>Work Phone:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Graduate Program:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Dissertation Working Title or Topic:</th>
</tr>
</thead>
</table>

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.

APPROVAL SIGNATURES

<table>
<thead>
<tr>
<th>Please type and sign</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advisor:</td>
</tr>
<tr>
<td>Signature:</td>
</tr>
<tr>
<td>Co-Advisor:</td>
</tr>
<tr>
<td>Co-Signature:</td>
</tr>
<tr>
<td>Graduate Program Director:</td>
</tr>
<tr>
<td>Signature:</td>
</tr>
<tr>
<td>Associate Dean, Graduate School:</td>
</tr>
<tr>
<td>Signature:</td>
</tr>
<tr>
<td>Dr. Janet C. Rutledge</td>
</tr>
</tbody>
</table>

Page 1
Revised by Jill Barr on 02/06/07
1. List all courses required for the degree, both completed and proposed.
2. Include credit hours and grades for completed courses. The credits from outside institutions must also be included. 
   Note: Official undergraduate transcripts and those from another institution showing any work accepted must be on file in the 
   Graduate School before the application can be approved.
3. Forward this application (2 pages) to the Graduate School, Administration Building, 208.

Name: ________________________________________________________________

last               first                middle initial

* Please total credits at bottom.

<table>
<thead>
<tr>
<th>Year</th>
<th>Title of Course</th>
<th>Course No. and Abbreviation</th>
<th>Fall Semester</th>
<th>Spring Semester</th>
<th>Summer Term</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Credits</td>
<td>Grade</td>
<td>Credits</td>
<td>Grade</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Total credit hours

Revised by Jill Barr on 02/06/07
University of Maryland Graduate School, Baltimore

NOMINATION OF MEMBERS
FOR THE FINAL 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.

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.

To: The Dean of the Graduate School

From: Committee Chairperson

Re: Student (Last, First, M.I.)

The following individuals are nominated to serve on the final MASTER’S DOCTORAL examination committee for this student.

The proposed examination date is

<table>
<thead>
<tr>
<th>NOMINEES</th>
<th>DEPARTMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Include Committee Chair)</td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td></td>
</tr>
</tbody>
</table>

APPROVAL SIGNATURES

Please type and sign

Committee Chairperson: Signature: Date:

Graduate Program Director: Signature: Date:

Associate Dean, Graduate School: Signature: Date:
Janet C. Rutledge

Dean’s Representative: For Graduate School Use Only

Revised by Jill Barr on 02/06/07

1034 – 015 & 1034 – 016

41
University of Maryland Graduate School, Baltimore

CERTIFICATION OF COMPLETION
OF DOCTORAL DISSERTATION
(to be filed with the Graduate School 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

is ready to be defended.

APPROVAL SIGNATURES

Please type and sign

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Dissertation Committee Chairperson:</td>
<td>Signature:</td>
</tr>
<tr>
<td></td>
<td>Date:</td>
</tr>
<tr>
<td>Dissertation Reader: (1)</td>
<td>Signature:</td>
</tr>
<tr>
<td></td>
<td>Date:</td>
</tr>
<tr>
<td>Dissertation Reader: (2)</td>
<td>Signature:</td>
</tr>
<tr>
<td></td>
<td>Date:</td>
</tr>
<tr>
<td>Graduate Program Director:</td>
<td>Signature:</td>
</tr>
<tr>
<td></td>
<td>Date:</td>
</tr>
</tbody>
</table>

Date of Final Examination: * __________________________

<table>
<thead>
<tr>
<th>Month</th>
<th>Day</th>
<th>Year</th>
</tr>
</thead>
</table>

* 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 Jill Barr on 02/06/07 1034 - 010
University of Maryland Graduate School, Baltimore
ANNOUNCEMENT OF PH.D. DISSERTATION DEFENSE

<table>
<thead>
<tr>
<th>Name: (last, first, M.I.)</th>
<th>Program:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location:</td>
<td>Date and Time:</td>
</tr>
<tr>
<td>Dissertation Title:</td>
<td></td>
</tr>
</tbody>
</table>

**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.

<table>
<thead>
<tr>
<th>Chair’s Name:</th>
<th>Chair’s Title:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name:</td>
<td>Title:</td>
</tr>
<tr>
<td>Name:</td>
<td>Title:</td>
</tr>
<tr>
<td>Name:</td>
<td>Title:</td>
</tr>
<tr>
<td>Name:</td>
<td>Title:</td>
</tr>
<tr>
<td>Name:</td>
<td>Title:</td>
</tr>
</tbody>
</table>

*Revised 8/28/02*
University of Maryland Graduate School, Baltimore
ANNOUNCEMENT OF PH.D. DISSERTATION DEFENSE

Name:

Last                   first                   M.I.

CONTINUATION OF ABSTRACT

Revised 8/28/2002
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.

<table>
<thead>
<tr>
<th>Course No</th>
<th>Course Title</th>
<th>Sem./Year</th>
<th>Credits</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

List courses in which student is currently enrolled.

<table>
<thead>
<tr>
<th>Course No</th>
<th>Course Title</th>
<th>Sem./Year</th>
<th>Credits</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Course No</th>
<th>Course Title</th>
<th>Sem./Year</th>
<th>Credits</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Approval Signatures

Please type and sign

Faculty Advisor: ___________________________ Signature: ___________________________ Date: ________________

Graduate Program Director: ___________________________ Signature: ___________________________ Date: ________________

Revised by Jill Barr on 02/06/07 Please provide a copy of this signed form to the graduate program support staff. 1034 - 007
List all courses completed for graduate credit at UMBC. Include research courses and independent study.

<table>
<thead>
<tr>
<th>Course No</th>
<th>Course Title</th>
<th>Sem./Year</th>
<th>Credits</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
University of Maryland Graduate School, Baltimore
CERTIFICATION OF COMPLETION OF MASTER’S DEGREE REQUIREMENTS

Name: (last, first, M.I.)  
Student ID:  

Type of Masters Degree:  
Select  
Graduation Term and Year:  
Select  20__  

Graduate Program:  

This student has met or is in progress of meeting all requirements of the Graduate School and the program for the degree, including (please check all that apply):

<table>
<thead>
<tr>
<th>Completed</th>
<th>In Progress</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Course Work</td>
</tr>
<tr>
<td></td>
<td>Thesis Defense</td>
</tr>
<tr>
<td></td>
<td>Capstone Project</td>
</tr>
<tr>
<td></td>
<td>Seminars and/or Research Papers</td>
</tr>
<tr>
<td></td>
<td>Written Comprehensive Examination</td>
</tr>
<tr>
<td></td>
<td>Oral Comprehensive Examination</td>
</tr>
<tr>
<td></td>
<td>Language Requirements</td>
</tr>
</tbody>
</table>

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:  

Revised by Jill Barr on 02/06/07  
1034 - 008
University of Maryland Graduate School, Baltimore

CERTIFICATION OF COMPLETION
OF MASTER’S THESIS
(To be filed with the Graduate School two weeks prior to the final examination)

Date: ____________________________
To: Dean of the Graduate School
From: ____________________________

The undersigned members of the student’s Thesis Examination Committee hereby certify that the thesis written by

______________________________ (last, first, middle) __________________________

entitled

is ready to be defended.

APPROVAL SIGNATURES
Please type and sign

<table>
<thead>
<tr>
<th>Thesis Committee Chairperson:</th>
<th>Signature:</th>
<th>Date:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Graduate Program Director:</th>
<th>Signature:</th>
<th>Date:</th>
</tr>
</thead>
</table>

Date of Final Examination: * ____________________________

Month       Day       Year

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

Revised by Jill Barr on 02/06/07

1034 - 009