



Pharmacology Graduate Student Handbook

Department of Neuroscience and Pharmacology

UNIVERSITY OF IOWA
CARVER COLLEGE OF MEDICINE

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Introduction

The Department of Neuroscience and Pharmacology has certain obligations to students, and likewise expects students to assume certain obligations to the Department and to themselves. Some of these obligations are enumerated below. Although this document states Departmental policies in considerable detail, mutual trust, self-respect, integrity, and pursuit of excellence form the basis of the Department's operating philosophy.

The Department has the following obligations to the student:

1. to provide an environment in which scholarship and meritorious research is fostered.
2. to be responsive to individual student academic and research needs.
3. to regularly evaluate student performance and progress.
4. to serve, through the faculty, as examples for the ethical conduct of research and the critical, objective evaluation of data.
5. to support and stimulate creative, original, and independent research.

The student has the following obligations to the Department:

1. to achieve and demonstrate a clear understanding of material presented in formal courses, seminars, and other teaching forums.
2. to demonstrate an aptitude and enthusiasm for all aspects of research: knowledge of the literature, formulation of hypotheses, experimental tests of hypotheses, analyses of experimental data, and clear presentation of data in both oral and written form.
3. to be industrious and produce, as early in the period of training as possible, results of research worthy of publication.
4. to strive for excellence as a way of scientific life, both during and after formal training.

Admission to the Program

The Pharmacology Ph.D. program is one of seven subprograms comprising the Biomedical Science Program (BSP) (<https://medicine.uiowa.edu/biomed/>). The BSP is a first-year umbrella program to which students apply and then matriculate into one of the seven subprograms. Admission requirements (<https://medicine.uiowa.edu/biomed/admissions/requirements>) include a minimum of a bachelor's degree from a regionally accredited American College or University or an equivalent degree from another country, and a minimum grade-point-average (GPA) of 3.00/4.00, or the foreign equivalent. Students earn a Ph.D. degree in Biomedical Science (Name of Subprogram).

Admission to the Ph.D. program with advanced standing is possible if a student has obtained graduate course credits prior to entering the program. In some cases, Pharmacology curriculum requirements may be waived by the Department of Neuroscience and Pharmacology Education Committee; each case is evaluated individually. In no instance will the comprehensive examination be waived. Regardless of academic credentials, a student entering with advanced standing should not anticipate completing a Ph.D. degree in less than approximately three years.

The Pharmacology Training Program

The Pharmacology Graduate Program is intended to provide academic knowledge of pharmacology and an optimal research experience. In the initial two years of training, the main emphasis of the program is on completion of coursework. During this period, the student will also identify a lab in which to affiliate and initiate thesis project research. Following completion of the core curriculum, the emphasis of this program switches to laboratory research. In terms of laboratory work, students should spend sufficient time in the lab to not only obtain a working knowledge of the field, but also to produce experimental results sufficient for publication so that a thorough evaluation of the student's aptitude and competence in research can be made.

The student is required to be industrious and productive in the laboratory during rotations and after selecting a laboratory in which to pursue thesis research. Note: if after joining a laboratory the student and advisor find the partnership is not working, a student may change advisors. It is also possible to have two faculty members co-direct the student's research activities, but one must be designated as the primary advisor and assign the student's research grade.

The general duties of the student's research advisor are as follows:

1. to provide a supportive environment that fosters productive research.
2. to direct the student's research activities, develop the student's research skills, and assign a research grade (satisfactory/unsatisfactory). Note: if more than one primary advisor is involved in an academic session, the Director of Graduate Studies will assign a grade after consultation with the advisors involved.
3. to monitor the student's academic progress.
4. to aid the student in the preparation of presentations ([see Appendix II](#)).
5. to help develop the student's oral and written communication skills.
6. to serve as Chair of the student's dissertation advisory committee.

The Ph.D. Program

Core Curriculum

The core courses required for the BSP (Pharmacology) Ph.D. degree are shown below in their recommended sequence. Some courses may be taken in a different sequence with permission of the student's advisor, the Department of Neuroscience and Pharmacology Director of Graduate Studies (DGS), and the appropriate course director(s). Additional elective courses may be taken with approval by the DGS and student's advisor. However, elective courses are not required for completing the pharmacology curriculum requirements.

Completion of the core curriculum is mandatory unless specifically waived by the Department Education Committee. At the request of the student, any of the core course requirements may be waived if the Department Education Committee agrees that such requirements have been met satisfactorily at a prior time.

Year	Fall			Spring			Summer
1	BMED:5207	Principles of Molecular & Cellular Biology	3 s.h.	BMED:7777	Biomedical Science Seminar	1 s.h.	
	BMED:5208	Topics in Principles of Molecular & Cellular Bio.	1 s.h.	BMED:7888	Biomedical Science Research	5+ s.h.	
	BMED:7777	Biomedical Science Seminar	1 s.h.	MMED:6260	Methods for Molecular/ Translational Medicine	1 s.h.	
	BMED:7888	Biomedical Science Research	5 s.h.	PCOL:5130	Basic Concepts in Pharmacology	3 s.h.	
	MPB:5153	Graduate Physiology	4 s.h.	PCOL:6250	Advanced Problem Solving	1 s.h.	
	PCOL:5204	Basic Biostatistics & Experimental Design	1 s.h.	PHAR:6504	Mastering Reproducible Science	1 s.h.	
2	BMED:7270	Scholarly Integrity/RCR 1	0 s.h.	BMED:7271	Scholarly Integrity/RCR 2	0 s.h.	Comp Exam
	PCOL:6015	Topics in Pharmacology & Neuroscience	1 s.h.	PCOL:6015	Topics in Pharmacology & Neuroscience	1 s.h.	
	PCOL:6080	Pharmacology Seminar	1 s.h.	PCOL:6080	Pharmacology Seminar	1 s.h.	
	PCOL:6090	Graduate Research in Pharmacology	5+ s.h.	PCOL:6090	Graduate Research in Pharmacology	5+ s.h.	
	PCOL:6203	Pharmacology for Graduate Students	5 s.h.				

In addition to the core courses listed above, students must satisfy the following requirements:

- Three, 10-week BSP laboratory rotations by the end of the Year 01 second semester
- Topics in Pharmacology & Neuroscience (PCOL:6015) and Pharmacology Seminar (PCOL:6080) each semester beginning in Year 03.
 - Students are to register for PCOL:6015 and PCOL:6080 each semester from Year 03 onward. However, when the 72 s.h. required by the Graduate College for graduation is achieved, students register for PCOL:6015, but not PCOL:6080. Note: while not officially enrolled in PCOL:6080, students are still required to attend and fully participate in the course as in previous semesters.
 - The PCOL:6015 requirement may be waived in the semester of the student's defense. This will apply to students who have prior permission from their thesis committee to defend that semester, and who have the necessary 72 s.h. required for graduation. Eligibility for the waiver will be determined by the DGS.

Registration

Pre-comprehensive

Students typically register for 15 semester hours during the Fall and Spring semesters of the first and second years. Prior to registering for courses, students must have their course registration approved by their BSP Graduate Advisor in year 1 and by the Department of Neuroscience & Pharmacology Director of Graduate Studies thereafter.

Post-comprehensive

Students who have fulfilled the core curriculum requirements and have completed the Comprehensive Examination should register only for Pharmacology Seminar (PCOL:6080) and Topics in Pharmacology & Neuroscience (PCOL:6015) while completing their thesis research and writing. Students who wish to take additional courses must obtain approval from both their research advisor and the Director of Graduate Studies.

Auditing courses

Auditing a course requires permission from the course director, the student's advisor and the Director of Graduate Studies.

Grading System

Grades carrying credit for the Ph.D. degree

These are A, B, C, and S (satisfactory).

Grades carrying no credit for the Ph.D. degree

These are D, F, I (incomplete), W (withdrawn without discredit), R (registered), and U (unsatisfactory). If a student receives a grade of D or F, they may retake the course one more time. However, while the new grade will appear on the student's transcript, the initial grade will also remain and contribute to the student's GPA.

Grade of incomplete

An incomplete (I) grade must be removed before the end of the next regular semester. If not removed by this time, it is automatically changed to an F by the University.

Audited courses

R (registered) is assigned for satisfactory completion of audited courses. If the course is dropped, W (withdrawn without discredit) is assigned.

Seminars and research

In the Department of Neuroscience and Pharmacology, these courses carry only S (satisfactory)/U (unsatisfactory) grades.

Academic Standing

The Graduate College requires students to maintain at least a 3.0 grade point average (GPA) throughout their graduate studies. If, after completing 9 or more semester hours of graded coursework, a student's GPA falls below 3.0, the student will be placed on academic probation by the Graduate College. If the cumulative GPA is not raised above 3.0 within a subsequent 9 semester hours of graded course work, dismissal procedures will be initiated by the Graduate College.

Pharmacology students are also required to maintain a 3.0 GPA for all courses within the core curriculum, and a grade of B or better is required in Pharmacology for Graduate Students (PCOL:6203). A student receiving a grade below a B in any core curriculum course may retake that course one time, the next semester it is offered. However, a student with a GPA of less than 3.0 in core curriculum courses will not be eligible to take the comprehensive exam.

Progress in coursework and/or research will be evaluated by Department of Neuroscience and Pharmacology faculty at the end of each academic year. At this stage, the faculty will recommend either progression through to the next year, transfer to the [M.S. program](#), or dismissal. Following this yearly meeting, the student will receive a written statement from the Director of Graduate Studies concerning overall performance and the faculty recommendation. If the student feels any of these actions is clearly unjustified, a formal appeal procedure exists (see [Appendix I](#)).

The Comprehensive Exam

Students must complete the core curriculum (with grade requirements listed above) before progressing on to the comprehensive exam.

Plan of study

A plan of study and a request for examination must be submitted to the Graduate College, by the Director of Graduate Studies and Department of Neuroscience and Pharmacology office staff, two weeks prior to the Ph.D. comprehensive examination. The plan of study lists courses that have been completed and those that remain to be completed.

Comprehensive examination

The comprehensive examination allows Department of Neuroscience and Pharmacology faculty to evaluate the research potential and scientific knowledge of a student at the mid-point within the Pharmacology Ph.D. program. The exam consists of a student writing and orally defending a research proposal.

There are three types of proposals a graduate program may require a student to write and defend.

1. **on-topic**: a proposal based on the student's dissertation research
2. **off-topic**: a proposal on a subject completely unrelated to a student's dissertation research
3. **related-but-distinct**: a proposal based on a topic related to the research program of the student's mentor(s) that is not the student's dissertation project or any other project being conducted in the laboratory

As students write an "on-topic" proposal in preparation for the comprehensive examination (see exam preparation section below), they are then asked to write and orally defend either a "related-but-distinct" proposal or, if they desire, an "off-topic" proposal for the comprehensive examination. Ultimately, the

comprehensive examination measures a student's command of facts and concepts regarding the proposed research and pharmacology. In addition, it is the point in the program for the student to demonstrate excellence in deductive, analytical, critical, and imaginative thinking.

The examination process normally begins during the Spring of the student's second year in graduate school and is completed during the subsequent summer. Exceptionally, and in consultation with the student's research advisor and the Director of Graduate Studies, a student may petition the Department Education Committee to take the examination at an earlier or a later date.

Exam Preparation

Multiple components of the Department of Neuroscience and Pharmacology curriculum were designed to prepare students for the comprehensive exam. Notably, the Advanced Problem Solving course (PCOL:6250) discusses important methodologies, strategies, and approaches to solving complex research problems and encourages students to work cooperatively to develop a research proposal around an assigned topic. Furthermore, the Pharmacology for Graduate Students course (PCOL:6203) contains a "Mock Comps" component, where students are guided through writing an "on-topic" proposal based on their dissertation research which they then 'defend' to a faculty panel.

Written Proposal Format and Submission

As noted above, the first part of the comprehensive exam entails the student writing a "related-but-distinct" or an "off-topic" proposal. **Note:** NEITHER THE STUDENT'S MENTOR NOR OTHER FACULTY should be involved in the conception, preparation, or evaluation of this written proposal prior to its submission.

To begin this process, the student will submit a specific aims page detailing the significance, aims, and methods of their anticipated comprehensive research proposal as well as a specific aims page for their dissertation research project (both one page, single-spaced) to the Director of Graduate Studies in early March. Following this submission, the Department Education Committee will discuss the comprehensive proposal aims page with the student in early-mid March. If the Department Education Committee has significant concerns regarding the feasibility of the comprehensive proposal, the proposal's overlap with the student's dissertation research, or the proposal's overlap with other ongoing projects in the mentor's laboratory (in either topic or experimental techniques), the student will be asked to revise and resubmit the specific aims page for the Committee's re-review before the student begins to write the full-length comprehensive proposal. If the Education Committee still has concerns after a second attempt, the Committee reserves the right to suggest appropriate changes to the proposal.

Once any significant concerns have been addressed, the student will independently prepare a research proposal in the form of an NIH National Research Service Award application with:

1. abstract (30 lines single-spaced)
2. specific aims (one page, single-spaced)
3. research strategy (background, significance, research design, and methods sections, ≤20 pages, double-spaced)
4. bibliography (no page limit)

The complete proposal should be a scholarly appraisal and critique of the chosen topic, including an outline of experimental approaches to test hypotheses central to a single thematic question.

Once complete, the research proposal must be submitted to the Director of Graduate Studies in late May.

Oral Examination

The Director of Graduate Studies will select five Neuroscience and Pharmacology faculty to serve on the student's Examining Committee. The student's mentor shall not be a member of the Examining Committee. The oral portion of the comprehensive exam will be scheduled for late May - mid June.

In both the research proposal and its defense, the Examining Committee will be looking for evidence that the student can:

1. critically review the literature on the chosen topic.
2. use this knowledge to formulate valid and testable hypothesis.
3. plan feasible experiments to test each hypothesis.
4. explain the rationale and justify the research plan.
5. describe the bases and limitations of the experimental approaches.
6. predict and interpret all potential outcomes resulting from proposed experiments and formulate alternate contingency plans.

During the oral defense, the Examining Committee may also determine whether the student has broad knowledge in the pharmacological sciences, and insofar as possible within the context of the topic of the proposal, may question the student in the following areas:

1. basic principles of drug absorption, distribution, elimination and metabolism
2. pharmacokinetics
3. drug receptor mechanics
4. receptor signaling and trafficking
5. neurotransmitters/neurotransmission

At the end of the oral defense, each Committee member will vote by signing the Graduate College form indicating whether the performance was satisfactory, with reservations or unsatisfactory.

1. If the student's performance is deemed satisfactory, then the student [will advance to Ph.D. candidacy](#).
2. Reservations would arise due to inadequacies in meeting one or two of the six goals outlined for the proposal and/or deficiencies in the pharmacology knowledge areas noted above. If the student's performance is deemed with reservations, the Committee will provide to the student in writing, no later than one week after the exam, the means and a timetable for removal of the reservations. If these are met, the student will be admitted to candidacy. If they are not met, the outcome of the exam will be deemed unsatisfactory.
3. If the student's performance is deemed unsatisfactory, the student will have one further opportunity to retake the examination (typically within six months) in accord with Graduate College regulations. This retake will be based upon a new proposal written on a topic different than that of the first examination. Failure of the exam for a second time will result in dismissal from the Ph.D. program.

If a student fails the comprehensive examination and is dismissed from the Ph.D. program, the student may petition the faculty to be given the opportunity to earn a [M.S. degree](#) by fulfillment of Graduate College requirements for the M.S. degree with thesis. A maximum of one year will be permitted for completion of the requirements for the M.S. degree. If the student feels dismissal is unjustified, a formal appeal procedure exists (see [Appendix I](#)).

Advancement to Candidacy

Admission to Ph.D. candidacy requires fulfillment of these three criteria:

1. Completion of the core curriculum with an overall GPA of at least 3.0 and grade requirements as noted in the [Academic Standing](#) section.
2. Demonstration of excellence in research, determined annually by the faculty as noted in the [Academic Standing](#) section.
3. Successful completion of the comprehensive examination, as determined by the examining committee as noted above.

Transfer to the M.S. Program

As stated in the [Academic Standing](#) and [Comprehensive Examination](#) sections, should the faculty conclude that the student has not performed at a level consistent with expectations of the Ph.D. degree or the student has failed the comprehensive examination twice, the faculty may recommend that the student transfer to the M.S. program. A student in the Ph.D. program may also petition the faculty, after consultation with the student's research advisor and the Director of Graduate Studies, requesting a transfer to the M.S. program. Such requests by the student may be made at any time but will not be automatically granted. Students must have maintained at least a 2.75 grade point average (GPA) to be eligible to transfer to the M.S. Program. For specific requirements of this program, refer to the [M.S. Program](#) section.

The Ph.D. Dissertation Advisory/Examining Committee

It is required that the Dissertation Committee be formed within one month of passing the Comprehensive Examination. The Committee will consist of the student's advisor (as chair), and four other faculty. The Committee must have at least three faculty with a primary appointment in the Department of Neuroscience & Pharmacology. If the chair does not have a primary appointment in the Department of Neuroscience & Pharmacology, one of the three members with a primary appointment will serve as co-mentor with the chair.

The student should meet with their Dissertation Committee at least once each year to review their progress and ask committee members for advice on experimental obstacles and/or planned experiments. This meeting should, to the extent possible, occur immediately after the student's yearly department seminar. The Committee is advisory and is not responsible for directing the student's dissertation work, which is the privilege and responsibility of the research advisor.

Once a student has scheduled a Dissertation Committee meeting, they should inform the Department of Neuroscience and Pharmacology office staff who will schedule a room for the meeting. The office staff will also, at that time, provide the student and their mentor with the Dissertation Committee and Individual Development Plan (IDP) document which needs to be completed and returned to the office no later than one week following the meeting. The student should also prepare an outline of their dissertation research, including a summary of what the student has completed thus far, which should be given to the Dissertation Committee prior to meeting.

The PhD Dissertation Examination

Independent research conducted by the student under the direction of an advisor is a primary focus of the student's activities throughout their graduate training. When the research problem has been resolved to the satisfaction of both the student and advisor, the student prepares a dissertation proposal which they defend before their Dissertation Examining Committee.

The product of the student's research is expected to be of sufficient complexity and impact to support its publication with the student listed as the first author. Therefore, neither the thesis defense presentation or examination should not be scheduled until a first authored or co-first author research manuscript has been accepted for publication. Exceptions to this requirement will be considered in unusual circumstances and will require the approval of the Director of Graduate Studies and the Head of the Department.

Before the examination

1. Students must first file an application for degree (see the University calendar for deadline).
2. A Final Exam Request must be filed with the Graduate College and a date, time, and place designated for the dissertation seminar and examination. Dissertation examinations may be scheduled at any time provided they fall within semester deadlines set by the Graduate College.

Final Exam Requests are submitted by the Department of Neuroscience and Pharmacology office. Therefore, the office must be informed well-in-advance of the planned dissertation defense.

3. A copy of the dissertation which has been approved by the advisor and is formatted following Graduate College guidelines ([Formatting Your Thesis | Graduate College - The University of Iowa \(uiowa.edu\)](https://uiowa.edu/graduate-college/formatting-your-thesis)) must be given to each member of the Dissertation Examining Committee at least two weeks before the examination.

During the examination

1. The dissertation defense is immediately preceded by a formal seminar. Unlike other student presentations, this seminar will represent a summarization and exposition of the student's entire thesis work; it should be an overview, a lecture from an expert in the field.
2. The final oral examination is a defense of the dissertation and will be conducted by the Dissertation Examining Committee, usually immediately after the thesis seminar.

After the examination

1. If the dissertation is not found to be acceptable, there will be the chance for re-examination within six months.
2. If the dissertation is found to be acceptable, the student should make final corrections to the document based on suggestions by the dissertation committee. Once complete, two copies

must be deposited with the Graduate College according to their published schedule. Another (bound) copy must be given to the Pharmacology office staff for placement in the departmental Reading Room.

Dissertation Expenses

1. Departmental funds or funds managed by the advisor will be used to pay for photocopying of the dissertation.
2. Departmental funds or funds managed by the advisor will be used to pay reasonable charges for photographs and artwork needed for the dissertation and for manuscripts submitted for publication or presented at national scientific meetings. Approval by the advisor or the Department must be obtained in advance.
3. Deposit fees, etc. will be paid by the candidate.

The M.S. Program

Core Curriculum

Students typically would transfer to the M.S. program after completing the first year in the Pharmacology Ph.D. program. By this time, they would have completed 32 semester hours of courses, excluding research (see Ph.D. [Core Curriculum](#) section). The M.S. degree requires 30 semester hours with not more than 9 semester hours of research. Students must have maintained at least a 2.75 grade point average (GPA). There is no comprehensive examination for this program.

Registration

Prior to registering for courses, students must have their course registration approved by both their research advisor and the Director of Graduate Studies.

Students who have fulfilled the core curriculum should register for Pharmacology Seminar (PCOL:6080) and Topics in Pharmacology and Neuroscience (PCOL:6015) while completing their thesis research and writing.

Grades carrying credit for the M.S. degree

These are A, B, C, and S (satisfactory).

Grades carrying no credit for the M.S. degree

These are D, F, I (incomplete), W (withdrawn without discredit), R (registered), and U (unsatisfactory). If a student receives a grade of D or F, they may retake the course one more time. However, while the new grade will appear on the student's transcript, the initial grade will also remain and contribute to the student's GPA.

Grade of incomplete

An incomplete (I) grade must be removed before the end of the next regular semester. If not removed by this time, it is automatically changed to an F by the University.

Seminars and research

In the Department of Neuroscience and Pharmacology, these courses carry only S (satisfactory)/U (unsatisfactory) grades.

The M.S. Thesis Advisory/Examining Committee

The Thesis Committee will be formed immediately after transferring to the M.S. Program. The Committee will consist of the student's advisor (as chair) and two other primary faculty from the Department of Neuroscience and Pharmacology.

The student should meet periodically (every 4 months) with the Committee to review progress and ask committee members for advice on experimental obstacles and/or planned experiments. The Committee is advisory and is not responsible for directing the student's thesis work, which is the privilege and responsibility of the research advisor.

The M.S. thesis is not expected to be as extensive as a Ph.D. thesis. In general, the M.S. thesis should be approximately equivalent to one full-length manuscript that could be submitted for publication. As such, defense of the M.S. thesis is expected to occur within 12 months of completing course work. A student may petition the Department Education Committee for an extension of this time. Prior to the defense and within the session in which the degree is to be granted, the student must file a Plan of Study approved by the student's research advisor, the Director of Graduate Studies, and the Head of the Department.

The M.S. Thesis Examination

Independent research conducted by the student under the direction of an advisor is a primary focus of the student's activities throughout their graduate training. When the research problem has been resolved to the satisfaction of both the student and advisor, the student prepares a thesis proposal which they defend before their Thesis Examining Committee.

The product of the student's research is expected to be of sufficient complexity and impact to support its publication with the student listed as the first author.

See the [Ph.D. Dissertation Examination](#) section for more information about what is required of the student before, during, and after the Thesis Examination.

Other Departmental Policies

Teaching

The Department feels that all students should be given the opportunity to gain experience in teaching as a part of their training. This may involve participation in the teaching programs of the Department to an extent consistent with the student's training and abilities. Students are also invited to participate in the Certificate in College Teaching Program ([Certificate in College Teaching | College of Education - The University of Iowa \(uiowa.edu\)](#)), etc.

Research Presentations

Students are required to present their research each year in the program. These presentations will be in the form of an annual workshop/seminar. Senior graduate students will not give a research presentation in their last semester of the program if the dissertation defense has been scheduled for that semester.

Stipends

The level of any stipend awarded to a student is set by the Carver College of Medicine. Appointments are for one year and are renewed only if performance and progress remain satisfactory.

Travel Policy

The Department believes that attendance at national scientific meetings is a beneficial part of training. Depending upon availability, the Department will provide funds to all students to attend one national meeting a year if they are presenting their research.

Graduate Student Employment Outside of The Department of Neuroscience and Pharmacology

The student should consider his/her graduate studies as a challenge that requires a complete commitment of time and effort. As such, students holding graduate research assistantships are not permitted to work for financial support outside of the Department.

Graduate Student Paid Leave

Graduate students in the Department of Neuroscience and Pharmacology are entitled to 15 paid vacation days during times acceptable to both the student and the research advisor as well as 18 days of paid sick leave per year. Students are also entitled to the following University Holidays: Independence Day, Labor Day, Thanksgiving, Christmas, New Year's, Martin Luther King Day, and Memorial Day.

Appendix I:

Departmental Procedure for Review of Academic Dismissal

The procedure for academic dismissal review is as follows:

1. Upon notification of a departmental decision that the student's performance is unsatisfactory, and that the faculty recommends dismissal, the student should discuss his/her situation with the Director of Graduate Studies. Such discussion should have the object of explanation and justification of the departmental decision for dismissal.
2. If the student thinks his/her dismissal is not justified, the student shall forward a written request for review of the reasons and actions leading to dismissal to the Head of the Department. This letter should outline his/her grievances in detail. In addition, the student should recommend three departmental faculty members to stand as a Review Committee. The Head of the Department shall then appoint three members of the departmental faculty to serve as the Review Committee. The Director of Graduate Studies will be an ad hoc member of this committee (if not asked by the student to be a regular member of the Review Committee).
3. The Review Committee shall elect a Chair.
4. The Review Committee Chair shall convene as soon as possible. Normally it is expected that the review process will be completed within two weeks of the student's formal request.
5. The student requesting the review shall have the opportunity to discuss his/her grievances directly with the Committee and provide any supporting material relevant to the review.
6. The Review Committee shall then determine what additional information or consultation is necessary to complete their review.
7. Upon review of relevant information, the Review Committee shall communicate their findings and recommendations in writing to the Head of the Department and the Director of Graduate Studies. The Committee's report should include major considerations in the decision. The Department Head, in consultation with the faculty, will make a final decision on the review.
8. Review Committee meetings and all written records of the foregoing procedure will be considered confidential. Communications may be released for general information only with the consent of the student and the Head of the Department.

Appendix II:

Guidelines for Student-Advisor Consultation on Student Presentations

1. Presentation organization is the responsibility of the student. However, the student's advisor should aid in its preparation at the request of the student.
2. The amount of assistance provided by the advisor should diminish with increasing experience of the student. Specifically, unlimited advice may be offered to the student presenting for the first time and little/no advice should be required for the student's thesis seminar; some intermediate level of advice should be available for presentations between the first and last years of the student's tenure.
3. These regulations should serve as guidelines for the organizational aspects (e.g., slide content, outline of presentation, etc.) of the seminar and should not be construed as representing any interference in the essential interpretation of results, projects for future work, etc.
4. Answering questions during and following all student presentations is primarily the responsibility of the student, not the student's advisor.