



# Pharmacology Graduate Student Handbook

Department of Neuroscience and Pharmacology

UNIVERSITY OF IOWA  
CARVER COLLEGE OF MEDICINE

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# Introduction

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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. Publication is a responsibility to share information with the scientific community, not a selfish act performed for personal advancement.
4. To recognize that "satisfactory performance" is an unacceptable objective; the student should strive for excellence as a way of scientific life, both during and after formal training.

# Admission to the Program

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The Pharmacology Ph.D program is one of seven subprograms that comprise the Biomedical Science Program (BSP) (<https://medicine.uiowa.edu/biomed/>). The BSP is a first-year umbrella program in which students apply to BSP and then matriculate into one of these seven BSP subprograms. The 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 as determined by the Office of Admissions. 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 faculty; each case is evaluated individually. In no instance will the Ph.D. 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 Training Programs

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The training program in pharmacology is intended to provide an academic knowledge of pharmacology and an optimal research experience that is sufficiently flexible to meet the needs of a variety of students. The emphasis of this program is on research. In the initial year(s) of study, the objectives of the student should be: (1) active participation in laboratory work; (2) spending sufficient time in the laboratory to obtain a working knowledge of the field; and (3) production of sufficient experimental results so that a valid 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 before as well as after selecting an advisor and laboratory in which to pursue thesis research. A student may change advisors at virtually any time. 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 research grade.

The general duties of the student's research advisor are as follows. (1) To direct the student's research activities, develop the student's research skills and assign a research grade (satisfactory/unsatisfactory) each semester. In the event that 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. (2) To guide the student's academic program. (3) To aid the student in the preparation of the student's presentations (see Appendix II). (4) To improve the student's oral and written communication skills. (5) To serve as Chair of the student's thesis advisory/examining committees.

# The Ph.D. Program

## Core Curriculum

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

Year	Fall			Spring			Summer
1	BMED:5207	Principles of Molecular & Cellular Biology	3s.h.	BMED:7777	Biomedical Science Seminar	1s.h.	
	BMED:5208	Topics in Principles Molecular & Cellular Bio.	1s.h.	BMED:7888	Biomedical Science Research	Arr.	
	BMED:7777	Biomedical Science Seminar	1s.h.	MMED:6260	Methods for Molecular/ Translational Medicine	1s.h.	
	BMED:7888	Biomedical Science Research	Arr.	PATH:5270	Pathogenesis of Major Human Diseases	3s.h.	
	MPB:5153	Graduate Physiology	4s.h.	PHAR:6504	Mastering Reproducible Science	1s.h.	
	PCOL:5204	Basic Biostatistics & Experimental Design	1s.h.	PCOL:5130	Fundamentals of Pharmacology	3s.h.	
				PCOL:6250	Advanced Problem Solving	1s.h.	
2	BMED:7270	Scholarly Integrity/RCR 1	0s.h.	BMED:7271	Scholarly Integrity/RCR2	0s.h.	Comps. Examination
	PCOL:6203	Pharmacology for Graduate Students	6s.h.	PCOL:6210	Receptors & Cell Signaling	3s.h.	
	PCOL:6015	Topics in Pharmacology & Neuroscience	1s.h.	PCOL:6015	Topics in Pharmacology & Neuroscience	1s.h.	
	PCOL:6080	Pharmacology Seminar	1s.h.	PCOL:6080	Pharmacology Seminary	1s.h.	
	PCOL:6090	Graduate Research in Pharmacology	Arr.	PCOL:6090	Graduate Research in Pharmacology	Arr.	
<p><b>In addition to the core courses (listed above), students must satisfy the following requirements:</b></p> <ul style="list-style-type: none"> <li>▪ Three, 10-week laboratory rotations by the end of the Year 1 second semester</li> <li>▪ Topics in Pharmacology &amp; Neuroscience (PCOL:6015) each semester beginning in Year 03</li> <li>▪ Pharmacology Seminar (PCOL:6080) each semester beginning in Year 03</li> </ul>							

Some students enter the department with a clear appreciation of the areas of research comprising the discipline of pharmacology and are prepared to choose a general or even specific research area for study. However, all students should be aware of the many research opportunities available in pharmacology and are therefore required to work under the direction of two different research advisors by the end of the first semester, before selecting a laboratory in which to pursue thesis research. These 10-week rotations are not to be approached by the student as passive research experiences.

## 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. Students who take unapproved courses may be subject to dismissal from the graduate program.

### Post-comprehensive

Students who have fulfilled the requirements of their Plan of Study and have successfully 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. Students who take courses not approved by either the Director of Graduate Studies or their Research Advisor may be subject to dismissal from the graduate program. A student whose only remaining requirement for a degree is the thesis defense should register for Doctoral Final Registration (GRAD:6003).

### Auditing courses

Auditing a course requires permission of the course director, the student's advisor, and the Dean of the Graduate College.

## The 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).

### Grade of incomplete

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

### Audited courses

R is assigned for satisfactory completion of audited courses. If the course is dropped, W is assigned.

### Seminars and research

In the Department of Pharmacology, these courses carry only S/U grades.

## Academic Standing

Students are required to maintain at least a 3.0 grade point average throughout their graduate studies; failure to do so after completing 9 semester hours of graded course work will result in placement of the student on academic probation by the Graduate College. If the cumulative grade point average is not raised above 3.0 within 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 grade point average 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 B in any core curriculum course may retake that course one time in the next semester it is offered. However, a student with a grade point average 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 the 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 (see section III.G), or dismissal. Following this yearly meeting, the student will receive a written statement concerning overall performance and the faculty recommendation. If the student feels any of these actions is clearly unjustified, a formal appeal procedure exists (Appendix I).

## Advancement to Candidacy

### Course requirements

Completion of the core curriculum is mandatory unless specifically waived by the departmental faculty. At the request of the student, any of the core course requirements may be waived if the majority of the faculty agree that such requirements have been met satisfactorily at a prior time. Specific grade requirements are listed above.

### Plan of study

A plan of study and a request for examination form must be filed in the Graduate College by the student two weeks prior to the Ph.D. comprehensive examination. The plan of study should list courses that have been completed and those that remain to be completed. It must be approved by the Director of Graduate Studies and by the Head of the Department. All core curriculum requirements must be met by the time of the comprehensive examination.

### The comprehensive examination

The format of the comprehensive examination stems from a desire by the faculty to evaluate the research potential and scientific knowledge of students at approximately the mid-point of the Ph.D. program. It is believed that this goal can be met by an integrated process that includes a written and an oral component. This examination is a measure of a student's command of facts and concepts. In addition, it is the point in the program for the student to demonstrate excellence in deductive and analytical ability and in critical and imaginative thinking.



The examination process will normally begin during the fourth semester and is completed during the fifth semester in the program. Exceptionally, and in consultation with the student's research advisor and the Director of Graduate Studies, a student may petition the faculty to take the exam at an earlier or a later date.

The exam will consist of writing and defending a research proposal in an area not directly related to work being conducted by the student or in the laboratory of the student's mentor(s). The student will prepare a one-page preliminary proposal summarizing the significance, specific aims and methods of the research proposal and will submit it to the Director of Graduate Studies no later than April 1. At a meeting to be held no later than April 15, the student will discuss the preliminary proposal with the Graduate Education Committee, which will then either approve or disapprove the proposal. Disapproval will usually occur if the topic is judged to be too close to work being conducted by the student or in the laboratory of the student's mentor or is thought to be without sufficient scientific merit. If disapproved, the student will be required to submit a new proposal on a different topic to the Director of Graduate Studies no later than May 15 and will then meet no later than June 1 to discuss the new preliminary proposal with the Graduate Education Committee, which will then either approve or disapprove the proposal on the grounds described above. If disapproved for a second time, the Committee, in consultation with the student's research advisor, will choose the topic for the subsequent research proposal.

After approval/assignment of a topic, the student will independently prepare a research proposal (no longer than 20 pages, double-spaced, excluding bibliography) in the form of an NIH National Research Service Award application with abstract, specific aims, background and significance, and research design and methods sections. It should be a scholarly appraisal and critique of the topic, including an outline of experimental approaches to test hypotheses central to a single thematic question. The research proposal must be submitted to the Director of Graduate Studies by June 1 (August 1 if originally disapproved or if topic is assigned by the Graduate Education Committee) and subsequently will be presented to, and defended before, an Examining Committee of 5 faculty selected by the Director of Graduate Studies and approved by the faculty. The student's mentor shall not be involved in the preparation of the proposal nor be a member of the Examining Committee.

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 such experiments, and formulate 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 and sign the Graduate College form indicating whether the performance was Satisfactory, Unsatisfactory or with Reservations. Reservations would arise due to inadequacies in meeting some of the six goals outlined for the proposal and/or deficiencies in some of the knowledge areas noted above. If the student's performance is deemed Satisfactory, the student will be admitted to candidacy. 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. 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, a timetable and the means 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 and the student will have one further opportunity to retake the examination as outlined above. Failure of the exam for a second time will result in dismissal from the Ph.D. program.

In the event that 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 full semester 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).

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

1. Completion of the core curriculum with grades as indicated above and an overall GPA of at least 3.0 before the student is allowed to take the comprehensive examination.
2. Excellence in research, determined annually by the faculty.
3. Successful completion of the comprehensive examination, as determined by the examining committee.

## The Ph.D. Thesis Advisory/Examining Committee

It is required that the Thesis 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 three faculty from the Department of Neuroscience & Pharmacology. If the chair does not have an appointment in the Department of Neuroscience & Pharmacology, one of the three members from the Department of Neuroscience & Pharmacology will serve as co-mentor with the chair.

The student should meet periodically with the Committee (at least once each year) to review 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 thesis work, which is the privilege and responsibility of the research advisor.

## Transfer to the M.S. Program

As stated in section III.D, should the faculty conclude at the annual evaluation of students that the student has not performed at a level consistent with expectations of the Ph.D. degree, 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.

# The M.S. Program

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## Core Curriculum

Students typically would transfer to the M.S. program after completing the first year in the Ph.D. program. By this time, they would have completed 19 credit hr of courses, excluding research. The M.S. degree requires 30 credit hours with not more than 9 hrs of research. The remaining courses required for the M.S. degree would include Pharmacology for Graduate Students (PCOL:6203) taken in the Fall of Year 2 and, as for the Ph.D. degree, Topics in Pharmacology (PCOL:6015), Pharmacology Seminar (PCOL:6080) and Pharmacology Research (PCOL:6090) every semester (see III.A). The student may be required to re-take a core curriculum course in which they did not receive a grade of "B" or better. There is no comprehensive examination for this program.

## Registration

Students typically register for 15 semester hours during the Fall and Spring semesters of the first year (III A) and the courses described in IV A for the second year.

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 take courses not approved by either the Director of Graduate Studies or the Head of the Department may be subject to dismissal from the graduate program.

Students entering after the beginning of a session may register for proportional credit. Such registration will be limited to Research (PCOL:6090) or Special Topics (PCOL:6099).

Students who have fulfilled the requirements of their Plan of Study should register for Pharmacology Seminar (PCOL:6080) and Topics in Pharmacology and Neuroscience (PCOL:6015) while completing their thesis research and writing. A student whose only remaining requirement for a degree is the thesis defense should register for Masters Final Registration (GRAD:6001).

## Auditing courses

Auditing a course requires permission of the course director, the student's advisor, and the Dean of the Graduate College.

## The Grading System

### 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).

### Grade of incomplete

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

### Audited courses

R is assigned for satisfactory completion of audited courses. If the course is dropped, W is assigned.

### Seminars and research

In the Department of Pharmacology, these courses carry only S/U grades.

## Academic Standing

Students are required to maintain at least a 2.75 grade point average throughout their graduate studies; failure to do so after completing 9 semester hours of graded course work will result in placement of the student on academic probation by the Graduate College. If the cumulative grade point average is not raised above 2.75 within 9 semester hours, dismissal procedures will be initiated by the Graduate College. In addition, the Department expects students to attain a grade of B or better in all courses within the core curriculum. A grade of B or better is required in Pharmacology for Graduate Students (PCOL:6203).

Progress in course work and/or research will be evaluated by the faculty at the end of each year. At this stage, the faculty will recommend either progression through to the next year, transfer to the Ph.D. program, or dismissal. Following this yearly meeting, the student will receive a written statement concerning overall performance and the faculty recommendation. In the case of dismissal that a student feels is unjustified, a formal appeal procedure exists (see Appendix I).

## The M.S. Thesis Advisory/Examining Committee

The Thesis Committee will be formed no later than the end of the first year. The Committee will consist of the student's advisor (as chair) and two other faculty from the Department of Pharmacology.

The student should meet periodically with the Committee (at least once each year) to review 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 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 faculty 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 and by the Head of the Department.

## Transfer To The Ph.D. Program

As outlined in section IV.D, the faculty may recommend, at the annual evaluation of students, that a student who has shown exceptional merit in the M.S. program transfer to the Ph.D. program. Although the faculty will generally initiate consideration of such transfers, a student in the M.S. program may also request, after consultation with the student's research advisor and the Director of Graduate Studies, a

transfer to the Ph.D. program. Such requests by the student should be made prior to the annual evaluation and will not be automatically granted.

## The Thesis Examination

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Independent research conducted by the student under the direction of an advisor is the primary focus of the student's activities. When the research problem has been resolved to the satisfaction of the student and the advisor, the student will prepare a thesis and defend this before the Thesis Examining Committee. For PhD candidates, 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, the thesis examination should not be scheduled until a first authored manuscript has been accepted for publication. Exceptions to this requirement will be considered in unusual circumstances and will require the approval of the Head of the Department.

### Before the examination

1. Students must first file an application for their 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 thesis seminar and thesis examination. Thesis examinations may be scheduled at any time provided that they fall within semester deadlines set by the Graduate College.
3. The candidate may circulate a copy of the thesis to one member of the Committee other than the advisor at least 4 weeks prior to the examination. The "pre-reader" is to read the thesis for conceptual and other errors which should be corrected before distribution of the thesis to the student's Thesis Examining Committee.
4. One copy of the thesis must be submitted to the Graduate College according to their published schedule for critical approval of format, etc. (See Graduate College publication, "Requirements for Manuscripts of Graduate Thesis"). Attention to the strict details of thesis format is required.
5. A copy of the thesis which has been approved by the advisor must be given to each member of the Thesis Examining Committee at least two weeks before the examination.

### During the examination

1. The thesis 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 thesis and will be conducted by the Thesis Examining Committee, usually immediately after the thesis seminar.

## After the examination

1. The report on the examination must be returned to the Graduate College office within 48 hours following the thesis defense. In the event that the thesis is not found to be acceptable, there will be the chance for re-examination within six months.
2. Two copies of the thesis, after inclusion of corrections required by the Committee, 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.

## Other Departmental Policies

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### Teaching

The Department feels that all students should be given the opportunity to gain experience in teaching as a part of their training. In practice this involves participation in the teaching programs of the Department to an extent consistent with the student's training and abilities.

### Research Presentations

Students are required to present their research each year in the program. For Ph.D. students, these presentations will be in the form of rotation reports in the first year, and a workshop/seminar thereafter. For M.S. students, the presentations will be in the form of a workshop in the first year and a workshop/seminar thereafter. The most senior graduate students will not give a research presentation in their last semester of the program if the thesis defense is anticipated.

### Stipends

The level of any stipend awarded to a student is set by the University. 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.

## 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 thesis 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.

## Graduate Student Employment Outside Of The Department Of 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 Pharmacology are entitled to 15 days of paid leave per year during times acceptable to both the student and the research advisor. They are also allowed 18 days of paid sick leave.



# Appendix I:

## Departmental Procedure for Review of Academic Dismissal

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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 informally with the Head of the Department. Such discussion should have the object of amplification 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 as a Review Committee three departmental faculty members. 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 the Committee as soon as possible. Normally it is expected that the review process will be completed within two weeks of its formal request for formation by the student.
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 Department Head.

## Appendix II:

# Guidelines for Student-Advisor Consultation on Student Presentations

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1. The organization of a presentation is the responsibility of the student. The student's advisor should provide assistance 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 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. Questions during and following all student presentations are the primarily the responsibility of the student, not the student's advisor.