

UNC Eshelman School of Pharmacy
University of North Carolina at Chapel Hill

HANDBOOK
FOR GRADUATE STUDENTS
IN THE
DIVISION OF MOLECULAR
PHARMACEUTICS

August 2014

TABLE OF CONTENTS

I.	GUIDELINES FOR GRADUATE STUDENT ADMISSION	
	A. Admission Procedure	3
	B. Financial Support for Graduate Students	3
	1. Teaching Assistantships	4
	2. Research Fellowships	4
	3. Research Assistantships	4
	4. Out-of-State Tuition Remission	4
	C. Progress Report Sheets	4
II.	DOCTOR OF PHILOSOPHY PROGRAM	
	A. Student Orientation	5
	B. First Year Registration	5
	C. Laboratory Rotations	5
	D. Selection of the Research Adviser	6
	E. Doctoral Dissertation Committee	6
	F. Required Courses	7
	G. Elective Courses	8
	H. Seminar Requirement	8
	I. Residence Credit	8
	J. Doctoral Examinations	8
	1. Doctoral Written Examination: Qualifying Examination Part I	9
	2. Doctoral Oral Examination: Qualifying Examination Part II	9
	K. Admission to Candidacy and Dissertation Proposal	10
	L. Application for Degree	11
	M. Dissertation and the Final Doctoral Oral Examination	11
III.	MASTER OF SCIENCE PROGRAM	
	A. Masters Committee	12
	B. Requirements for the Master of Science	12
	C. Residence Credit	12
	D. Qualifying Examination Part II & Defense	12
	E. Application for Degree	13
	F. Thesis and Final Oral Examination	13
IV.	GUIDELINES FOR REVIEW OF ACADEMIC PROGRESSION	
	A. Performance Reviews	14
	B. Guidelines for Dealing with Unsatisfactory Performance	14
V.	MISCELLANEOUS INFORMATION	
	A. Purchasing	14
	B. Keys	14
	C. Copying and Office Supplies	15
	D. Library	15
	E. Laboratory Notebooks	15
	F. Graduate Student Grievance Committee	16
	G. The Honor Code	16

H. Time Commitment and Vacations	17
I. Nondiscrimination Statement	17
J. Committee on Impairment	17
K. Hepatitis B Immunizations	17
L. Health and Safety Requirements	18
VI. APPENDICES	19
● Electives	
● Research Evaluation Form	
● Graduate Student Progress Report Sheets	
● Report of Doctoral Committee Composition	
● Doctoral Examination Report	
● Report of Master's Committee Composition	
● Master's Exam Report	
● Transfer Credit Recommendation Form	
● Admission to Candidacy	
● Application for Graduation	
● Employee Check-Out Form	

GRADUATE STUDY IN MOLECULAR PHARMACEUTICS

The graduate program in the UNC Eshelman School of Pharmacy is under the jurisdiction of the UNC Graduate School. The following policies and procedures supplement and expand the degree requirements listed in the *Graduate School Handbook* and the *Graduate Record of the University of North Carolina at Chapel Hill* in effect at the time of admission. Students should obtain copies of these documents from the following websites:

<http://handbook.unc.edu/>

<http://www.unc.edu/gradrecord/>

The Division of Molecular Pharmaceutics in the UNC Eshelman School of Pharmacy offers graduate study leading primarily to the doctor of philosophy (PhD) in Pharmaceutical Sciences granted by the Graduate School of the University of North Carolina at Chapel Hill. In some instances, the Division also confers the master of science.

GUIDELINES FOR GRADUATE STUDENT ADMISSION

A. Admission Procedure

In addition to the requirements of the Graduate School, the following applies:

1. The Graduate Record Examination (GRE) is required of all applicants.
2. The Test of English as a Foreign Language (TOEFL) and GRE are required of all international students. The TOEFL is not required for international students whose native language is English or who already possess a degree from a US institution.
3. A fall term, senior year grade report will be required before admission will be considered.
4. Recommendations for admission and financial support are made by the division director of graduate studies (DSG) to the Graduate Education Committee (GEC) after the application is reviewed by the division faculty.

B. Financial Support for Graduate Students

It is the philosophy of the Division of Molecular Pharmaceutics to support each of its full-time graduate students through provision of a stipend via one of the mechanisms listed below, health insurance, and a tuition remission. The division expects that each student it supports will be 100 percent committed to his or her program of study, and will not be engaged in external employment. All students must be registered full-time (at least 9 credit hours) during the fall and spring semesters until all required coursework is completed, at which time students register for 3 credit hours of dissertation research or dissertation writing and 1 credit hour of seminar. Summer registration is required only for students who defend their dissertation during either of the two summer sessions. The only exception to this rule is for

students who have enrolled in a part-time program of study approved by the division Faculty.

1. Teaching Assistantships

These assignments currently provide a basic stipend for one academic year's service excluding summer sessions, health insurance coverage, and in-state tuition support as detailed in your letter of appointment. Teaching assistantships usually require 12-15 hours a week in the performance of assigned duties, as outlined in the teaching contract. Financial support for a student in the doctoral program as a teaching assistant normally will not exceed three academic semesters. Students who, by virtue of circumstances, cannot meet this general guideline will be reviewed by the division DGS and the division faculty. During the summer months of the first year of study, the student will be supported by his/her research adviser.

2. Research Fellowships

The University, the UNC Eshelman School of Pharmacy Foundation, a variety of private organizations, a number of pharmaceutical companies, and federal agencies sponsor fellowships for qualified graduate students. Annual stipends vary, depending on the sponsor.

3. Research Assistantships

Research assistants are supported by grants held by faculty members. Research assistants receive a basic stipend for twelve months' service, health insurance coverage, and in-state tuition support.

4. Out-of-State Tuition Remission

Out-of-state tuition remission is available to provide tuition support for all students, including international students. This remission is, however, available for only up to five years in residence in MOPH program.

C. Progress Report Sheets

A Progress Report Form (see Appendices, pg. 25-27) is used as a mechanism for keeping the research adviser, dissertation committee (DC) members, and division DGS updated on the progress of each student. Students are responsible for (a) providing information to the division administrative assistant every semester in order to keep the Progress Report Form updated and (b) presenting this updated sheet to the committee members during committee meetings held at least twice each year. Until the DC is formed, students meet with divisional faculty on an annual basis.

DOCTOR OF PHILOSOPHY PROGRAM

A. Student Orientation (one week prior to the beginning of the semester)

A meeting will be scheduled between each entering student and the division chair and/or division DGS for the following purposes:

1. Answer any preliminary questions regarding the program, duties, and stipends.
2. Discuss important areas of deficiency in his/her undergraduate training.
3. Elicit from the student the areas of major research interest.
4. Advise the student concerning procedures for selecting a research adviser.
5. Assign office and laboratory space.

B. First Year Registration

1. The division DGS serves as first-year adviser and can guide students on appropriate course registration.
2. Registration for the first semester of the first year will be facilitated by the School's registrar, currently [Rosa McDonald](#). Thereafter, students should use the online registration process through Student Central.
3. During the spring preregistration, the graduate student must register for the following fall semester in order to ensure his/her continued enrollment in the Graduate School. Students are expected to diligently pursue their research projects during summer sessions.

C. Research Experiences or Laboratory Rotations

1. Laboratory rotations are a valuable experience and students are expected to work toward acquiring research skills in addition to their coursework. Three 10-week laboratory rotations are required. The student may conduct a laboratory rotation either with the anticipated research adviser or with another faculty member; therefore, no restrictions are placed on where the student conducts the laboratory rotation, but all parties (student and rotation adviser) must be in agreement. It is important, however, that the student finds a research adviser and attaches him/herself to a laboratory by the end of the second semester. Note that the student's summer stipend depends upon being a productive lab member in a given research lab.
2. The goals for the lab rotation will be outlined in the Research Evaluation Form (see Appendices pp. 23–24). At the end of the lab rotation, an evaluation of the research experience will be summarized and the evaluation placed in the student's file. A Research Evaluation Form will be completed every semester.
3. At the end of the laboratory rotation, the student must either (a) confirm his or her selection of research adviser (see **section D** below), or (b) seek another faculty member as research adviser. If course (b) is selected, the research adviser so

chosen may, at his or her discretion, require the student to carry out a laboratory rotation before agreeing to accept the student as an advisee.

D. Selection of the Research Adviser

Once a student has selected a research adviser (see **section C** above), the student must notify the division DGS of his or her choice in writing, with a copy to the research adviser.

E. Doctoral Dissertation Committee (DC)

The doctoral DC consists of the student's research adviser, chair (separate from the research adviser) and three other members chosen in consultation with the research adviser. At least three of the five committee members must be from the UNC Eshelman School of Pharmacy, with the research adviser and administrative chair chosen from the faculty members in MOPH. One member must be from another school of the University or another research-oriented institute. If a student is considering a committee member from outside the university, he/she must first obtain the approval of the associate dean for research and graduate education. While the chair is concerned with the student's academic progression in general, the research adviser is to closely monitor the student's research progression and direction. The DC should be formed within the fourth semester of graduate study subsequent to passing the Qualifying Exam Parts I and II. The Report of DC Composition Form (see Appendices, pg. 28) must be submitted to the Graduate School (forms are available from the administrative assistant's office).

In order to improve communications between students and DC members, and in an effort to streamline student progression through the dissertation research, committee meetings must be held at least twice per year, preferably once between January and June, and a second meeting between July and December. At least one of these meetings should be formal in nature with all committee members present, if possible. The format of the other meetings is up to the discretion of the student and adviser (e.g., students may wish to meet on an individual basis with all members of the committee). Regardless of the format of the committee meeting, students should provide to committee members a written summary of research progress-to-date, at least one week prior to the meeting. This research progress report should be written in the form of a manuscript (abstract, introduction, materials and methods, results, discussion, references and figures/tables for all key data). The student should also present to committee members his/her updated Student Progress Sheets to document that a committee meeting has been held.

A timeline outlining research proposed for the next six months should be included in the report. A copy of this progress report should be provided to the division administrative assistant at least one week prior to the committee meeting for the student's file. In addition, the student should prepare a summary statement of the outcomes of the committee meeting within one week after the meeting and distribute a copy of this to all committee members and the division administrative assistant for the student's file. The outcomes summary statement should include pertinent issues that were discussed during the committee meeting as well as additions, deletions, or changes in the direction of the research relative to what was outlined in the progress

report. Students failing to meet these requirements in a given semester will receive an “Incomplete” for PHRS 991, Research and/or 994, Doctoral Dissertation.

F. Required Courses

A. Courses for the Emphasis on Drug Delivery

Course Title	Course Number	Credit Hour	Semester
Ethical Dilemmas	PHCY 801	1	Fall
Nanomedicine	MOPH 738	3	Fall even years
Drug Metabolism	MOPH 810	3	Fall
Advanced Pharmaceutics	MOPH 862	3	Fall even years
Advances in Drug Delivery	MOPH 864	3	Fall odd years
Quant. Meth. Clin. Res.	DPET 831	3	Spring
PK Theory and Applications	DPET 855	3	Fall odd years
Seminar ^a	PHRS 899	1	Fall, Spring
Research	PHRS 991	3	Fall, Spring
Masters Thesis	MOPH 993	variable	Fall, Spring
Doctoral Dissertation	PHRS 994	>3 ^c	Fall, Spring

a. Students must register for seminar every semester in which they are in residence.

b. Students must register for 3 hours research credits each semester prior to candidacy.

c. A minimum of 6 credit hours required for graduation; must be registered for at least 3 credit hours in each semester in candidacy including the semester in which the final defense is conducted.

B. Courses for the Emphasis on Pharmacoengineering

Course Title	Course Number	Credit Hour	Semester
Ethical Dilemmas ^d	PHCY 801	1	Fall
Advanced Pharmaceutics	MOPH 862	3	Fall even years
Advances in Drug Delivery	MOPH 864	3	Fall odd years
Bio Transport	BMME 890.030	3	Spring
PK Theory and Applications	DPET 855	3	Fall
Quant. Meth. Clin. Res. ^e	DPET 831	3	Spring
Math Elective (Appendix)		3	
Engineering Elective (Appendix)		3	
Seminar ^a	BMME 890	1	Fall, Spring
Research	PHRS 991	≥3 ^b	Fall, Spring
Masters Thesis	MOPH 993	variable	Fall, Spring
Doctoral Dissertation	PHRS 994	>3 ^c	Fall, Spring

a. Students must register for seminar every semester in which they are in residence.

b. Students must register for at least 3 hours research credit prior to candidacy.

c. A minimum of 6 credit hours required for graduation; must be registered for at least 3 credit hours in each semester in candidacy including the semester in which the final defense is conducted.

d. Either PHCY 801 or GRAD 721, Research Ethics.

e. Either DPET 831 or BIOS 550, Basic Elements of Probability and Statistical Inference.

Specific division course requirements for the PhD are given above. Course programs are arranged on an individual basis by the division DGS and the student's chosen research adviser to correct deficiencies and develop strengths in the area of his/her interest and research program. This course of study may be amended as the student proceeds and develops other needs or interests. It is the responsibility of the division DGS and research adviser to select courses to develop a core of knowledge needed for the doctoral examinations.

Excluding research and seminar credits but including credits from elective courses (see below), students must take a minimum of 24 credits of course work prior to sitting for the qualifying exam. Students who have taken relevant coursework prior to enrollment in the Division of Molecular Pharmaceutics Graduate Program may use that coursework to satisfy graduate course requirements provided that the courses were taken within eight years of entry into the graduate program and that passing scores (H, P, or A, B) were received (see Transfer Credit Form, Appendices, pg. 32). Courses taken more than eight years previously may be waived on a case-by-case basis (particularly if the individual has been using the relevant skills frequently) at the discretion of the research adviser and with the approval of the division faculty. All requests for waivers of required courses should be submitted in writing to the division DGS for review by the division faculty. Note that while a student may waive a particular required course, he or she may still complete a minimum of 24 credits of course work.

G. Elective Courses

The student is also required to select elective courses that total at least 6 credit hours (see Appendices pp. 20–22 for suggested elective courses). Other appropriate courses may be selected with the permission of the division DGS and his/her research adviser.

H. Seminar Requirement

All students must attend the division's regularly scheduled seminars and dissertation/thesis defenses each semester that they are in residence. Beginning in the third year of study, each student is required to present one seminar each academic year on his/her research or other topic approved by the research adviser. The student's dissertation defense will satisfy the seminar requirement during the student's final year of study.

I. Residence Credit

For the doctoral degree, at least two of the required four semesters of residence must be earned in continuous registration on this campus. This requirement may be fulfilled by two regular semesters of full-time registration (nine or more credit hours) or by less than full-time registration over a larger number of continuous semesters. During this period of continuous registration, no regular semester registration of less than three hours is allowed. While summer registration is not required to maintain continuous registration, any credit of three hours or more per session will be computed on the usual basis as part of the required continuity. Residency credit in any term of summer sessions is computed the same as during the regular semester.

Residency credit earned on work for a master's degree is applicable as residency credit for a Doctoral degree.

- Nine semester hours of credit is considered full-time and earns a full semester of residence credit.
- Six to eight semester hours of credit earns $\frac{1}{2}$ semester of residence credit.
- Three to five semester hours of credit earns $\frac{1}{4}$ semester of residence credit.
- Neither graduate credit nor residency credit is received for required undergraduate courses.

J. Doctoral Examinations

The qualifying examination process consists of a written portion (QE Part I) and an oral defense of an independently developed proposal (QE Part II). The examinations together shall accomplish the following.

- Assess the extent and currency of the candidate's knowledge in pharmaceutical science in general and drug delivery in particular.
- Identify weaknesses in the candidate's knowledge that should be remedied by additional instruction.
- Assess the ability to integrate and apply knowledge acquired through course work to practical problems.
- Test the ability of the candidate to compose a hypothesis driven project or to develop a drug delivery project based on proven hypotheses.
- Assess the candidate's ability to convey it in presentation format, and participate in a searching and critical scientific discussion of the topic.

Taken together, the outcome of these examinations will determine the candidate's fitness to continue work toward the doctorate.

1. Doctoral Written Examination: Qualifying Examination Part I

Part I of the qualifying examination is a written comprehensive examination taken upon completion of required graduate course work, i.e., after the third semester. It must be passed even if a master's degree has been granted at this or any other institution.

The written qualifying examination will be offered every year in January. This take-home exam will be given to the student at 8:00 a.m Thursday and is to be turned in at 8:00 a.m. on the following Monday. The exam is composed of questions, based on courses offered, that are submitted by the division's faculty members. Each faculty member will grade the responses to his/her own question(s). After grading, the faculty meets to decide on the performance of each student sitting for the exam.

There are three possible outcomes: pass, provisional pass entailing some remedial work, and fail. A student judged to have failed the examination, either in its entirety or a significant portion thereof, will be required to retake the

relevant portion(s) of the exam the following May. At the discretion of the division faculty, the student may be required to complete other assignments in lieu of retaking a portion of the examination. The results of each student's performance will be conveyed to him/her within one month of the examination. Upon successful completion of the written examination, Part I of the Doctoral Exam Report will be completed and filed in the student's file (see Appendices, pg. 29). Afterward, the student may proceed to the Qualifying Examination Part II, Doctoral Oral Examination.

A student who fails the examination for the second time becomes ineligible for further doctoral work. No student may continue in the program, or take the examination a third time, without approval by the administrative board of the Graduate School.

2. Doctoral Oral Examination: Qualifying Examination Part II

The oral examination consists of construction, presentation, and defense of a research proposal. A three-member ad hoc committee, which excludes the student's research advisor, will be formed to administer the examination for all proposals submitted in a given academic year. The student should first submit a one-page preproposal to the Exam Committee members at a date assigned by the committee, who will decide if the proposed study is sufficiently independent of the ongoing or planned research projects of the student's research advisor.

If the one-page study outline is deemed appropriate, the student is given four weeks to construct a full research proposal formatted according to [NIH form PHS 398](#) for an R21 application. The proposal should consist of sections titled Specific Aims, Research Strategy (Significance, Innovation, Approach) and Literature Cited. Excluding the last section, the Research Strategy should be no longer than six pages. The completed proposal should be submitted to the members of the exam committee by the established deadline (i.e., four weeks after approval), with a copy filed in the division office.

The administrative assistant will schedule oral exams to take place during the months of March through April. While the presence of a majority of the faculty is not required, the entire faculty is invited to participate. The exam committee will conduct the examination and subsequently make a recommendation to the faculty regarding the student's performance. If a majority of the faculty is present for the exam, a decision can be reached that day. If a majority of faculty members are not present or the student's performance requires discussion, the decision may be held until the next faculty meeting (held monthly).

Upon successful completion of the Doctoral Oral Examination, Part II of the Doctoral Exam Report Form (Appendices, pg. 29) will be signed by the chair of the exam committee and retained in the student's file.

K. Admission to Candidacy and Dissertation Proposal

Subsequent to successful outcome of the Qualifying Examination Part II, the PhD candidate and his/her DC will define the dissertation research project at the first committee meeting. The DC may request that the student present an outline of the project for detailed discussion. It is desirable that the DC receive presentation material at least one week in advance. After the meeting, the minutes will finalize the course of research direction. If the student's dissertation project has been approved, Part II of the Report of Doctoral Composition (Appendices, pg. 28) should be signed by the committee and submitted to the Graduate School. A student in the PhD Program may apply for admission to candidacy after successful completion of the Preliminary Written and Oral Examinations (see Appendices, pg. 33). This form is not required but may be useful if a student needs to prove their ABD (All But Dissertation) status for fellowship or job applications.

L. Application for Degree

When a candidate nears the end of his/her research and can anticipate final approval of the dissertation, he/she should formally apply for a degree, to be conferred at the next commencement, according to the date listed in the Application Deadlines section of the [Graduate School website](#). Application for graduation must be done online by the student following the link located at the Graduate School website. Also note at that same site the deadline for the submission of the completed manuscript. Both the application and manuscript submission must be completed by their respective deadlines before participating in the graduation ceremony.

If the student already has applied for candidacy for the degree but has failed to meet the deadline for a specific commencement, he/she must make an application for the degree again.

M. Dissertation and Final Doctoral Oral Examination

For PhD candidates, the scheduling of the Final Doctoral Oral Examination should normally occur no later than five years after beginning graduate studies. The student must notify the division administrative assistant to schedule the examination at a mutually agreeable time and date for the student's DC and the division faculty. The examination must be scheduled at least two weeks in advance. A copy of the final draft of the dissertation must be placed in the division office at least two weeks before the final defense.

This final examination shall be held only after all members of the DC have had adequate opportunity (at least two weeks) to review a formal draft of the doctoral dissertation which the candidate has prepared. The research adviser is responsible to the members of the student's DC for determining that the draft is in an appropriate form for their evaluation. The committee may, at the time of the Final Doctoral Oral Examination but not later, request alterations and corrections. The DC Chair and research adviser are responsible for verifying that such changes have been made, and may delegate this responsibility to the committee member who imposed the requirements. The Final Doctoral Oral Examination

should be a true defense of the dissertation. It will be open to all members of the graduate faculty. The DC makes the final decision regarding whether or not the student passes or fails this examination.

Upon completion of the above requirements, Part III: Report of the Final Oral Examination of Doctoral Exam Report Form (see Appendices, pg. 29) is submitted and the dissertation, in final typed or electronic form, designed to meet the standards as defined in *A Guide to the Preparation of Thesis and Dissertations*, is registered with the Graduate School.

MASTER OF SCIENCE PROGRAM

Students are not admitted directly into the master of science program in the Division of Molecular Pharmaceutics. Typically, students would have participated in student orientation, first-year registration, and laboratory rotations prior to deciding to complete the master of science instead of the doctor of philosophy program.

Many of the administrative requirements for the master's degree are identical to those listed previously for the doctoral degree, with the following exceptions:

A. Masters Committee

The Masters Committee (MC) consists of three faculty members from the MOPH Division. The student's adviser may not serve as the chair of the MC. It should be formed as soon as possible (typically after completing three semesters of graduate study). The Report of Master's Committee Composition form must be completed and kept in the student's file within the Division (see Appendices, pg. 30). Forms are available from the Administrative Assistant's Office.

B. Requirements for the Master of Science

Master's students are required to complete the same coursework and qualifying examinations as doctoral students; however, the time length for research is shorter and the depth of the research project is less rigorous than doctoral dissertation requirements. In some instances, the less-than-satisfactory outcome of Qualifying Examination Part I may lead students to the master of science. Master's students must have registered for at least 3 credit hours of MOPH 993 (Master's Thesis) prior to the final thesis defense. For students who need an approved substitute for the QE Part I, the substitute will be decided by the MC.

C. Residence Credit

The program of study will normally take the equivalent of three calendar years. The student should realize that specific coursework requirements and research considerations will influence the actual length of time. The residency requirement is described in the *Graduate School Handbook*.

D. Qualifying Examination Part II and Final Defense

Students pursuing a master of science will follow a similar process of Qualifying Examinations as PhD students. An important difference involves Exam Part II. Upon successful completion of the Qualifying Examination Part I or its substitute (see Appendices, Part I on pg. 31), the master's candidate may proceed to the Qualifying Examination Part II. This is a defense of master's thesis research proposal in front of the MC. The assessment by the MC is approved by the division faculty (Part II on both pg. 30 and 31). The division administrative assistant must schedule the final thesis defense, or Final Masters Oral Examination, after confirming the time and date with the student's committee and division faculty. All division faculty will be invited to participate in the examination and invited to provide advice to the MC which makes the final decision regarding whether or not the student passes or fails the defense (see more in **section E** below).

E. Application for Degree

When a candidate nears the end of his/her research and can anticipate final approval of the thesis, he/she must formally apply for a degree to be conferred at the next commencement, according to the date listed at the [Graduate School website](#). If the student already has applied for the degree but has failed to meet the deadline for a specific commencement, he or she must make an application for the degree again.

F. Thesis and Final Oral Examination

The thesis must be submitted to the Graduate School according to the schedule in the calendar of events for a specific commencement. For master of science candidates, the scheduling of the Final Masters Oral Examination should normally occur no later than three years after beginning graduate studies. The student must notify the division administrative assistant to schedule the Final Masters Oral Examination at a mutually agreeable time and date for the student's committee and division faculty. This examination must be scheduled at least two weeks in advance. A copy of the final draft of the thesis must be placed in the divisional office at least two weeks before the final defense.

This Final Masters Oral Examination shall be held only after all members of the MC have had adequate opportunity (at least two weeks) to review a formal draft of the master's thesis which the candidate has prepared. The research adviser is responsible to the members of the student's MC for determining that the draft is in an appropriate form for their evaluations. The committee may, at the time of the Final Masters Oral Examination but not later, require alterations and corrections. The research adviser is responsible for verifying that such changes have been made, and may delegate this responsibility to the committee member who imposed the requirements.

The Final Masters Oral Examination should be a true defense of the thesis. It will be open to all members of the graduate faculty. The MC makes the final decision regarding whether or not the student passes or fails this examination. Upon completion of the above requirements, the Report of the Final Oral Examination is submitted (Appendices, Part III of pg. 31), and the thesis, in final typed form, designed to meet the standards as defined in *A Guide to the Preparation of Thesis and Dissertations* is registered with the Graduate School.

GUIDELINES FOR REVIEW OF ACADEMIC PROGRESSION

A. Performance Reviews

The performance of each graduate student at the end of each year will be reviewed by the division faculty (for first-year students as well as other students who have yet to pass the written qualifying examination, or who are experiencing progression difficulties) or by the DC, and a recommendation to continue or discontinue support for the student will be made. Each graduate student will be notified of the status of his/her appointment for the next year (July 1 to June 30) at the time of his/her performance review.

B. Guidelines for Dealing with Unsatisfactory Performance

1. A graduate student becomes academically ineligible to continue in the Graduate School if he/she receives any grade of F or receives a grade of L for nine or more hours.
2. The GEC will review the performance of every student requiring readmission and forward an appropriate recommendation to the Division DGS for final action. Various grade combinations will disqualify a graduate student, and all students should be familiar with the Graduate Degree Requirements stated in the University of North Carolina Graduate School Handbook.
3. Readmission for the purpose of pursuing a master's degree after receiving a grade of "F" will normally be recommended only in cases of extenuating circumstances.
4. The teaching performance of all departmental teaching assistants will be reviewed annually by the division faculty. Unsatisfactory performance will become part of the student's overall record.

MISCELLANEOUS INFORMATION

A. Purchasing

Chemicals and equipment not available may be purchased. The student should secure all necessary details (name, quantity, stock number, supplier, address, etc.) and present them, along with an indication of intended use, to his/her research adviser. Purchase on school funds or research grants must be approved by the division chair and the research adviser.

B. Keys

Upon arrival, the student will be issued keys for the building and research laboratories. The main office handles all key requests. The Key Request Form can be picked up in the division administrative assistant's office to be completed and taken to the Office of the Dean. The student's research adviser should be consulted if keys other than those issued are needed. Upon completion of the student's work,

all keys must be returned to the division administrative assistant's office where a check-out form (Appendices pg. 34) must be completed.

C. Copying and Office Supplies

Use of the photocopier and the availability of office supplies are limited to members of the faculty and staff. Students are expected to supply their own consumables (paper, pencils, etc.). Photocopying related to the student's research project (journal articles, laboratory notebook pages) is allowable. Photocopying related to program requirements (course notes, textbook chapters, dissertations proposals or dissertations) should be done at the student's expense.

D. Library

Although PubMed and other online sources are frequently used, several libraries on campus are of interest to students majoring in molecular pharmaceuticals. The Health Sciences Library, located across the street from the UNC Gillings School of Global Public Health, has a wide collection of pharmaceutical and biomedical journals. The Chemistry Library maintains a complete collection of chemical journals. Both Duke and N.C. State University libraries are open to UNC students. Books or journals may be used or borrowed from these libraries either in person or by Inter-Library Loan. Consult any librarian for more details about these services.

E. Laboratory Notebooks

It is essential that graduate students know how to maintain an adequate research notebook. It is recognized that some flexibility is necessary to accommodate differences in the kinds of records generated in the different scientific fields. The following should be minimum requirements for a laboratory notebook:

- The book should possess a cover and be permanently bound, 9¼ x 11 inches.
- Each page of the book should be numbered sequentially, including a numbered carbon sheet perforated for easy removal.
- Printed on the cover:
Laboratory Notebook
UNC Eshelman School of Pharmacy
Chapel Hill, NC 27599

The graduate students in their respective divisions can then include their area of studies (e.g., Division of Molecular Pharmaceuticals, Division of Chemical Biology and Medicinal Chemistry, etc.).

When entering information in the notebook, the following procedures should be considered:

- Write with a dark, permanent ink. Pencil should not be used.

- Since more than one notebook is likely to be used over the period of the graduate student's tenure, identify each notebook with a successive series of letters or numbers (e.g., A, B, C, or I, II, III, etc.).
- Begin a new page for each new experiment. On the starting page, provide a short identifying title of the objective of the experiment. Try not to leave blank lines or spaces between entries. Do not tear out pages. Do not obliterate entries (in those cases where an experiment has failed); merely cross out so that the original entry can still be read. If large sections are involved, merely draw diagonal lines through the section. Any correction or later changes entered into a notebook should bear a marginal notation that includes the date of the change and the initials of the investigator.
- Date each day's entries, either in a margin or at the beginning line of the entry.
- The investigator should sign the bottom of each dated page in a notebook. If deemed necessary for intellectual property protection, the adviser or designee should review the notebook monthly and initial and date each page next to the investigator's signature. The date entered by the advisor is that on which he/she reviewed the notebook.
- Ancillary data, such as chemical spectral records, computer printouts, graphs, statistical analysis, etc. should be retained in an available organized form. Some of these may be too bulky to attach to the laboratory notebook page, but should be identified in the notebook by an appropriate key system that corresponds with identifying notations in the records.
- The student should write clearly, describe the work adequately and should not use strange abbreviations. Someone else may need to decipher the entry. The information should be entered directly in a notebook and not on loose scraps of paper.
- The laboratory notebook remains the property of the division. At the completion of the degree program, the student may receive the duplicate pages.

F. Graduate Student Grievance Committee

Grievances from graduate students are to be addressed to the GEC which will function as the Grievance Committee. A grievance should be submitted to the chair of the GEC for referral to the committee. The grievance should be presented in written form, signed by the sender, and must clearly state the nature of the grievance. Where possible, documentation or some other reasonable manner of substantiating the grievance should accompany the request.

G. The Honor Code

It shall be the responsibility of every student at the University of North Carolina at Chapel Hill to obey and support the enforcement of the Honor Code, which prohibits

lying, cheating or stealing when these actions involve academic processes or University, student, or academic personnel acting in an official capacity.

Academic work and insuring its integrity is a joint enterprise involving faculty and students. Because many graduate students serve as teaching assistants it is incumbent upon graduate students to familiarize themselves with both the specific student and faculty responsibilities. These are described in the *Record of the University of North Carolina at Chapel Hill (The Graduate School)*.

H. Time Commitment and Vacations

Pursuit of a graduate degree is not a nine-to-five, Monday-through-Friday enterprise. Students are expected to make the appropriate commitment of time and effort to complete their programs of study within the specified period of time. It is expected that students receiving stipend support will not seek outside employment, as this dilutes the student's commitment to graduate studies. Graduate students should be present at the School during the semester and the entire final examination period. Graduate students are eligible for the official University Holidays (New Year's Day, Fourth of July, etc.) and may take up to ten working days as vacation during nonsemester, nonexamination periods. Students are not expected to sign out for these vacation periods, but they must clear their absence informally with their research adviser and let him or her, as well as the division administrative assistant, know where they might be contacted. Fall and spring break time taken off from work is considered vacation time. Paid maternity leave will be provided in accordance with the Graduate School's policy as detailed in the [Graduate Student Handbook](#). An application for family leave must be completed and submitted to the Graduate School for approval at least eight weeks prior to taking the planned leave. The [application form](#) can be obtained at the Graduate School's website.

I. Nondiscrimination Statement

In accordance with the laws of the State of North Carolina and the United States, the University does not discriminate against any person in its employment and educational activities on the grounds of race, color, religion, national origin, sex, age, or physical disability.

J. Committee on Impairment

The purpose of this policy statement is to provide structure for the identification of persons at risk of substance abuse and a method of intervention which seeks to be helpful to the individual and at the same time protective of the public interest. A copy of the School's Policy on Impairment of Student Due to Substance Abuse is available from the School's Office of Graduate Education and Scholarship.

K. Hepatitis B Immunizations

The UNC Eshelman School of Pharmacy has a voluntary program for hepatitis B vaccine immunization. Because pharmacy students may participate in activities during their training and, subsequently, in their career that may place them at risk of developing hepatitis B, students are encouraged to carefully consider immunization. Additionally, some health-care institution offering experimental rotations may require proof of adequate immunization against hepatitis B. The student is responsible for

the cost of the immunization. Further details may be obtained from the office of the School's associate dean for professional education.

L. Health and Safety Requirements

Several courses (1-3 hours) and workshops sponsored by the Department of Environment, Health & Safety are required for graduate students in laboratory-based programs. All students are required to be registered laboratory workers, and to take the EHS laboratory standard course. Students working with radioactivity must participate in radiation safety training; students working with animals are required to take the laboratory animal handling course. These courses are required only once while a student is at UNC. Students working with human tissues or fluids must take the EHS blood-borne pathogens course on an annual basis. Details may be obtained from the [Department of EHS](#).

APPENDICES

Electives

Research Evaluation Form

Graduate Student Progress Report Sheets

Report of Doctoral Committee Composition

Doctoral Examination Report

Report of Master's Committee Composition

Master's Exam Report

Transfer Credit Recommendation Form

Admission to Candidacy

Employee Checkout Form

ELECTIVES: This is a partial list of electives that may be relevant to graduate studies in MOPH. Students are advised to select courses in consultation with their research adviser or the director of graduate studies.

BIOCHEMISTRY AND BIOPHYSICS

505 Molecular Biology (3). Prerequisites: undergraduate biochemistry or genetics, and organic chemistry. Techniques in molecular biology, mechanisms of replication, transcription, and translation of genetic material in prokaryotic and eukaryotic systems; gene sequence and organization; regulatory mechanisms; and oncogenes. Fall.

643 Cell Structure, Function, and Growth Control I (2 or more). Prerequisites: undergraduate cell biology or biochemistry or permission of instructor. Comprehensive introduction to cell structure, function and transformation. Fall.

644 Cell Structure, Function, and Growth Control II (2 or more). Prerequisites: undergraduate cell biology or biochemistry or permission of instructor. Comprehensive introduction to cell structure, function and transformation. Spring.

651 Macromolecular Structure and Dynamics (1). Prerequisites: Chemistry 130 and two semesters of physical chemistry or permission of instructor. Macromolecules as viewed with modern computational methods. Fall.

BIOMEDICAL ENGINEERING

890 Biotechnology (3) This course is designed to prepare a biomedical engineering student with the survey tools to understand key concepts in modern biotechnologies. The principles in this course will be taught with reference to diseases of relevance to biomedical engineering and to engineering principles where appropriate. Fundamental concepts, theory, design, operation, and analysis of the most common biotechnologies in bioengineering will be presented. Students will learn the four main technologies of the “-omics” sciences and pattern recognition algorithms used for analysis of the omics data, hardware technologies for imaging live animals or bioreactors (MRI, MRS), bioreactors and tissue engineering principles, and microfabricated devices (lab-on-a-chip, BioMEMS).

515 Introduction to Systems Biology (3) Prerequisite: Engineering-level mathematics, e.g., MATH 383, 528. Basic knowledge/ability within Mathematica, Matlab, Python or other programming language. Cells (and tissues, organisms, etc.) are highly sophisticated machines capable of performing a vast range of functions. Underlying these functions are multiple networks consisting of many interacting elements. This course investigates the development and application of basic mathematical approaches and models to the study of networks. Particular emphasis will be placed at the level of molecular networks, including the study of gene- and protein-circuits and their role in controlling cell behavior and phenotype.

510 Biomaterials (3) Prerequisite: BMME 589 or one year of college-level biology. Chemical, physical engineering and biocompatibility aspects of materials, devices or systems for implantation in or interfering with the body cells or tissues. Food and Drug Administration and legal aspects.

790 Systems Physiology (3) Course intended to provide graduate students with an introduction to systems and organ physiology.

CHEMISTRY

430 Introduction to Biological Chemistry (3). Prerequisites: Chemistry 62 or 66H, 62L or 66L; Biology 11. The study of cellular processes including catalysis, metabolism, bioenergetics, and biochemical genetics. The structure and function of biological macromolecules involved in these processes is emphasized. Fall and Spring.

431 Nucleic Acid Chemistry (3). Prerequisites: Chemistry 130 and Biology 50. Study of reactions and chemical properties basic to nucleic acids; chemical synthesis as well as biosynthesis; nucleic acids in protein biosynthesis. Spring.

432 Protein Chemistry (3). Prerequisite: Chemistry 130. Structural properties of proteins; active-site chemistry; chemical modification of proteins; metalloproteins; coenzyme-enzyme interactions; organization of enzyme systems. Fall.

435 Physical Chemistry of Biological Macromolecules (3). Prerequisites: Chemistry 130, 181 and 182. Structure of proteins, nucleic acids and lipids. Structural transitions and intermolecular interactions. Properties of macromolecular assemblies. Techniques for the study of structure and function-optical spectroscopy, magnetic resonance, hydrodynamics, scattering, diffraction. Fall.

466 Advanced Organic Chemistry I (3). Prerequisite: Chemistry 62 or 66H; prerequisites or corequisites, Chemistry 150, 181. A survey or fundamental organic reactions including substitutions, additions, eliminations, and rearrangements; static and dynamic stereochemistry; conformational analysis; molecular orbital concepts and orbital symmetry. Fall.

467 Advanced organic Chemistry II (2). Prerequisite: Chemistry 166. Spectroscopic methods of analysis with emphasis on elucidation of the structure of organic molecules: ^1H and ^{13}C NMR, infrared, ultraviolet, ORD_CD, mass and photo-electron spectroscopy. Spring.

480 Introduction to Biophysical Chemistry (3). Prerequisites: Chemistry 61 or 65H; Physics 25, Math 32. Does not carry credit toward graduate work in Chemistry or credit toward any track of the B.X. degree in Chemistry. Application of thermodynamics to biochemical processes; enzyme kinetics; properties of biopolymers in solution. Fall.

481 Physical Chemistry I (3). Prerequisites: Chemistry 21 or 25H; prerequisite or corequisite, Math 83; prerequisite, Physics 26, 27. Thermodynamics, kinetic theory, chemical kinetics. Fall and Spring.

PHARMACOLOGY

701 Introduction to Molecular Pharmacology (2). Prerequisites: Biochemistry 100 and Physiology 140, or their equivalents and permission of the instructor. A one semester course on general principles of pharmacology. Fall.

702 Principles of Pharmacology and Toxicology (3). A one semester course that focuses on advanced pharmacological and physiological principles. Spring.

PATHOLOGY AND LABORATORY MEDICINE

463 Electron Microscopy (4). Prerequisite: permission of the instructor. Theoretical and practical aspects of electron microscopy. Application of transmission and scanning electron microscopy to pathology, with emphasis on ultrastructure of cells and organelles. Two lecture and six laboratory hours a week. Fall.

MICROBIOLOGY AND IMMUNOLOGY

614 Immunobiology (3) Prerequisites: a strong background in molecular biology, eukaryotic genetics, and biochemistry and permission of instructor. Topics include immunochemistry; genetic mechanisms, and development of cells and cell interactions; hypersensitivity, autoimmunity, resistance to infection. Three lectures. Fall.

CELL AND DEVELOPMENTAL BIOLOGY

804 Introduction to Medical Cell Biology (1). Introduction to the structure and function of cell membranes, membranous organelles, the nucleus, and the filamentous components of the cytoplasm. Fall.

MEDICINAL CHEMISTRY AND NATURAL PRODUCTS

804 Drug Discovery Target I (3). Prerequisites: Chemistry 166, Biochemistry 104 or 105, Pharmacology 117, or permission of the instructor. A survey of modern concepts in Medicinal Chemistry covering key methodologies and techniques, drugs and targets, and case examples. Fall.

833 Molecular Target-Based Drug Discovery II (3). An integrated introduction to molecular target-based drug discovery. Spring.

807 Molecular Foundations in Chemical Biology (3). Prerequisites: CHEM 262 or equivalent or permission from the instructor. Instructor: David Lawrence (Fall). This course is designed to emphasize the elements of organic chemistry required for the design and synthesis of biologically active compounds (e.g. drugs).

Electives for Math and Engineering

1. Math/Applied Math Electives

BMME 515	Biomathematical Modeling
BMME 530	Digital Signal Processing I
BMME 775	Image Processing and Analysis
BMME 730	Digital Signal Processing II
BMME 860	Numerical Methods for Biomedical Engineering
MATH 528	Mathematical Methods for the Physical Sciences
MATH 535	Introduction to Probability
MATH 547	Linear Algebra for Applications
MATH 564	Math Modeling
MATH 566	Introduction to Numerical Analysis
MATH 577	Linear Algebra
MATH 661	Scientific Computation
MATH 768	Mathematical Modeling I

2. Engineering Electives

BMME 465	Biomedical Instrumentation I
BMME 532	Microelectrode Techniques
BMME 530	Digital Signal Processing
COMP 665	Images, Graphics and Vision
BMME 550	Medical Imaging: Ultrasound, MRI and Optical
BMME 560	Medical Imaging: X-ray, CT and Nuclear
BMME 551	Medical Device Design
BMME 580	Microcontroller Applications I
BMME 515	Introduction to Systems Biology
BMME 510	Biomaterials
BMME 505	Biomechanics
GNET 711-717	(3 x 1 credit) Bioinformatics

Other courses can fulfill these electives upon petition by the student and approval by the director of graduate studies or the student's PhD advisory committee.

Research in Molecular Pharmaceutics – Course Evaluation

PHRS 991

MOPH 993

PHRS 994

Student's Name _____ Semester _____

Research Adviser and Mentor _____

I. Goals for the semester *(to be completed no later than the first week of classes):*

Student's initials: _____ Adviser's initials: _____ Date: _____

II. Evaluation (to be completed within one week of the end of the rotation period and/or by the end of final exams):

- 1) List milestones reached in this semester (*e.g. scientific meeting participation, abstract or manuscript publication, writing/defense of research proposal, writing/defense of doctoral dissertation – attach extra pages if necessary*).

- 2) Identify the goals met and those that were not met (*add a brief explanation*):

III. Semester grade: H P L S F

Student's Signature _____ **Date** _____

Advisor's Signature _____ **Date** _____

Division of Molecular Pharmaceutics
Graduate Student Progress Report Sheet ¹

Graduate Student Name _____

Date of Admission _____

Requirements	Timing Suggested	Date Completed	Form to be Completed
Orientation	Beginning of the 1 st semester		
Select Research Advisor	Within 1 st or 2 nd semester		Written memo to Chair and DGS
3 Lab Rotations	By the end of the 2 nd semester		Research Course Evaluation
Qualifying Exam (QE) Part I	January of year 2 ²		Part I of Doctoral Exam Report Form
QE Part II	By the end of April, year 2 ³		Part II of Doctoral Exam Report Form
Select Dissertation Committee (DC)	By the end of 4 th Semester		I: Report of Doctoral Committee Composition
Submit Dissertation Proposal to DC	Discretion of DC Chair		II: Report of Approved Dissertation Project
Submit Application for Candidacy	Follow UNC Grad. School calendar		Application for Admission to Candidacy
DC Meeting	Twice a year		See pg. 29 of this handbook
Final Dissertation Defense	Discretion of DC chair		Part III of Doctoral Exam Report Form
Submit Application for Graduation	Follow UNC Grad. School calendar		Application for Graduation

¹ – This document is primarily for PhD students. For MS students, necessary variations should be incorporated.

² – It is assumed that the student entered the program in the Fall.

³ – For MS students it will be two semesters.

Curriculum for Ph.D. Program ¹

Required Courses	Number	Date Completed	Grade Received
Nanomedicine	MOPH 738		
Drug Metabolism	MOPH 810		
Advanced Pharmaceutics	MOPH 862		
Advances in Drug Delivery	MOPH 864		
Ethical Dilemmas	PHCY 801		
Quant. Meth. Clin. Res.	DPET 831		
PK Theory and Application	DPET 855		
Research (≥3 credit hours each semester prior to candidacy)	PHRS 991		
Doctoral Thesis (≥3 credit hours each semester after candidacy)	PHRS 994		
Seminar	PHRS 899		

In addition, the student is advised to take the following courses if no equivalent was taken as an undergraduate:

Course	Number	Date Completed	Grade Received
Basic Pharmaceutics I & II	PHCY 410 & 411		
PK and Biopharmaceutics	PHCY 413		

The student is required to take at least three 2-credit elective courses (total 6 credit hrs).

Elective Course	Number	Date Completed	Grade Received

¹ – Curriculum for MS Program is essentially the same as above except that Doctoral Thesis PHRS 994 is replaced with MOPH 993, Master's Thesis.

Schedule of Committee Meetings

	Members Attending	Comments
Year 2 (1 st meeting) Date: _____	1. 4.	
	2. 5.	
	3. 6.	
 (2 nd meeting) Date: _____	1. 4.	
	2. 5.	
	3. 6.	
Year 3 (1 st meeting) Date: _____	1. 4.	
	2. 5.	
	3. 6.	
 (2 nd meeting) Date: _____	1. 4.	
	2. 5.	
	3. 6.	
Year 4 (1 st meeting) Date: _____	1. 4.	
	2. 5.	
	3. 6.	
 (2 nd meeting) Date: _____	1. 4.	
	2. 5.	
	3. 6.	
Year 5 (1 st meeting) Date: _____	1. 4.	
	2. 5.	
	3. 6.	
 (2 nd meeting) Date: _____	1. 4.	
	2. 5.	
	3. 6.	



THE UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL

The Graduate School

DOCTORAL EXAM REPORT FORM

NOTE: The Committee Composition form should be on file with the Graduate School **before** exam results are reported.

Student's Name _____ PID# _____
 Department/Curriculum/School: _____

PART I: REPORT OF PRELIMINARY WRITTEN EXAMINATION

On behalf of a majority of the examining committee, I certify that the above named student:

_____ successfully passed the examination _____
 _____ failed to pass the examination _____ *signature of committee chair* _____ *date*

Check here if student previously failed exam. Date(s): _____

By initialing, the committee chair certifies that this student was registered as required during the term this work was completed.

PART II: REPORT OF ORAL EXAMINATION

On behalf of a majority of the examining committee, I certify that the above named student:

_____ successfully passed the examination _____
 _____ failed to pass the examination _____ *signature of committee chair* _____ *date*

Check here if student previously failed exam. Date(s): _____

By initialing, the committee chair certifies that this student was registered as required during the term this work was completed.

PART III: REPORT OF THE FINAL ORAL EXAMINATION (defense of dissertation)

A majority of the committee for the above named student has judged the dissertation defense to be:

_____ acceptable _____
 _____ unacceptable _____ *signature of committee chair* _____ *date*

Committee member signature/date	Pass/Fail	Committee member signature/date	Pass/Fail
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Check here if student previously failed exam. Date(s): _____

By initialing, the committee chair certifies that this student was registered as required during the term this work was completed.

PART IV: REPORT OF THE FINAL DISSERTATION (can be completed at the same time as Part III as appropriate)

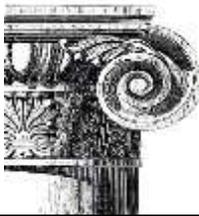
A majority of the committee for the above named student has judged the dissertation to be:

_____ acceptable _____
 _____ unacceptable _____ *signature of committee chair* _____ *date*

Committee member signature/date	Pass/Fail	Committee member signature/date	Pass/Fail
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

By initialing, the committee chair certifies that the required edits were made and the final document is approved for electronic submission.

- Submit to the Graduate School after all activities have been successfully completed
- Keep copies for your files



THE UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL
 The Graduate School
TRANSFER CREDIT RECOMMENDATION FORM

Student's Name _____	PID# _____
Major: _____	Degree Intent: _____

For each transfer course listed below there should be a corresponding UNC-CH course it is replacing. In the case that there is no equivalent course, a generic course for your graduate program may be used. Additionally, an official transcript should be attached or on file with the Graduate School. The UNC Transfer Credit Policy can be found in the Graduate Handbook at: <http://handbook.unc.edu/>

Transfer Credit University	Year	Term	Transfer Course	Transfer Credit Hours	Grade	=	Corresponding UNC-CH Course	Approved Credit Hours
						=		
						=		
						=		
						=		

After thorough evaluation, I recommend the following courses for transfer credit.

 Director of Graduate Studies

 Date

Transfer Credit Hours

Master's Students: Up to six of the 30 minimum credit hours, or up to 20% of the total credit hours required for programs with more than 30 hour requirements, may be transferred from accredited institutions or from other graduate programs within this institution. Grades earned on transferred work must be equivalent to B or better. Transfer credit does not satisfy semesters in residence credit.

Doctoral Students: No credit hour limitation. Graduate coursework must be from accredited institutions or from other graduate programs within this institution and cannot be dissertation enrollment credit. Grades earned on transferred work must be equivalent to B or better. Transfer credit does not satisfy semesters in residence credit.

Credit received for graduate-level courses taken as an undergraduate may be transferred into either degree above with the program's approval provided the course **did not count** toward the requirements of the undergraduate degree.

Please submit this form to the Graduate School for processing and inclusion in the student file.

THE UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL
The Graduate School

APPLICATION FOR ADMISSION TO CANDIDACY* FOR A DOCTORAL DEGREE

Candidate's
 Name: _____ PID# _____
 (first) *(middle)* *(last)*

in the Department, Curriculum or School of _____ hereby applies for
 admission to candidacy for the degree Doctor of _____.

Is a foreign language required of this student? _____ If so, list below the language required and how the requirement has been satisfied:

Language _____ Satisfied by _____

Is there a substitute requirement in lieu of a foreign language for this student? _____ If so, list the substitute requirement and specify how it has been satisfied:

Signed

Department Chair or Director of Graduate Studies

Date _____

*Admission to candidacy requires that both the doctoral and written examinations have been passed, all course work required by the programs of the major and minor(s) has been completed, and that any foreign language or language substitute requirements have been met.

FOR GRADUATE SCHOOL USE ONLY

Provisions:	Committee:	Admitted to Candidacy:
Courses: /394:	Prospectus:	Degree:
Language:	Residence:	Department:
Written:	Final Oral:	
Doctoral Oral:	Dissertation:	



UNC
ESHELMAN
SCHOOL OF PHARMACY