

# NICHOLAS SCHOOL DOCTORAL STUDENT HANDBOOK

*LAST UPDATED 3/1/04*

## PREFACE

Students are expected to become familiar with those sections of the current Graduate School [Bulletin](http://registrar.duke.edu/bulletins/Graduate/2000/) describing general procedures and regulations. <http://registrar.duke.edu/bulletins/Graduate/2000/> In addition to the general regulations of the Graduate School, the Nicholas School of the Environment and Earth Sciences & Earth Sciences has developed certain procedures and requirements, compiled in this booklet. Use the Timetable of Academic Progress on p. 6 to determine what requirements you have to meet at each stage in order to stay on track for your degree. The Director of Graduate Studies (DGS) is the faculty member who represents graduate students and is responsible for all records and matters pertaining to graduate students. The DGS serves as the liaison between NSEES and the Graduate School. The assistant to the DGS may be found in A308, LSRC.

## TABLE OF CONTENTS

PREFACE	1
TABLE OF CONTENTS	2
TIME TABLE FOR ACADEMIC PROGRESS	4
Important annual deadlines	5
GENERAL ACADEMIC INFORMATION	
Registration	6
Courses in other schools	6
Interinstitutional registration	6
Auditing	7
Add/drop	7
Center for Environmental Education/Continuing education courses	7
Honor code	8
Assistantship payrolls, picking up checks	8
Funding for conference travel	8
Eligibility	8
Terms of award	8
Reimbursement	8
Examinations	8
Graduation	8
Transcripts	10
Complaints/problems/suggestions	10
Harassment Policy	10
GENERAL GRADUATE STUDENT INFORMATION	
Director of Graduate Studies	11
Registration	11
Leaves of absence	11
Transfers	12
Grades	12
English Language proficiency	13
Financial aid	13
Assistantships	13
Loss of assistantship	13
Tutoring	13
Tuition awards	13
Guidelines for other employment	14
Financial support from other sources	14
Progress review	14
Research in absentia	14
Time limitations	14

GRADUATE DEGREE REQUIREMENTS	
The master's degree	
The MS degree	15
The joint AM/JD degree	15
MS in Statistics	15
Bypassing the master's degree	15
Registration	15
Committee members	16
Time limits	16
The PhD degree	
The PhD degree	17
Registration and tuition	17
Major and related (minor) courses	17
Committee members	18
Certification	18
Teaching requirements	18
Foreign language requirement	18
Residence	19
Advancing to doctoral candidacy	19
Oral preliminary examinations/research proposal defense	19
Dissertation	20
Final examination	20
Time limits	20
GENERAL SCHOOL/UNIVERSITY INFORMATION	21
CHECK LISTS AND TIME TABLES	
PhD oral prelim checklist	21
Dissertation submission and defense timetable	22
Thesis defense checklist	23

## TIMETABLE FOR ACADEMIC PROGRESS

### **Entering students:**

- Meet with the Director of Graduate Studies and your major professor before registration.

### **First semester:**

- Meet with major professor before registration for spring semester.
- International students whose native language is not English must pass the English proficiency test or take Composition and Oral Communication listed as Graduate Studies 200 A & B in the first year.

### **Second semester:**

- Begin to identify potential faculty members for your PhD committee.
- Consult with major professor and advise the Director of Graduate Studies whether or not you intend to take a Master's degree.
- Meet with major professor before the end of the semester for progress review (and for request of continuation of financial aid, if appropriate).

### **Third semester:**

- By now you must have selected your Ph.D. Committee; hold your Certification meeting before registration for spring term. The report of the certification meeting (submitted to the Director of Graduate Studies) includes a plan for your major and minor courses and a proposed dissertation topic. Complete the "Proposed Program of Study Toward PhD Degree" form and "Advisory Committee Approval" form available from the DGSA in Room A308 and return to A308.

### **Fourth semester:**

- Complete Master's degree if following that route.
- Meet with your PhD committee before the end of the semester for progress review (and for request of continuation of financial aid, if appropriate).

### **Fifth semester:**

- Take oral preliminary exam (normal time). Formal notice in writing must be sent to the DGS two weeks prior to exam. This list should include a list of your committee members who will be in attendance, their email addresses, and the time and location of your exam. Exams must occur while a term for which you are registered is in session unless prior approval has been granted by Leigh DeNeef, Associate Dean of the Graduate School.

### **Sixth semester:**

- Oral preliminary examination must be completed. If it is not, a request for extension must be sent to the Graduate School by the DGS and student's advisor.
- Normally last semester of coursework. Be sure that minor area proficiency and departmental course requirements have been met.
- Normally the last semester to satisfy the TA requirement.
- Meet with your PhD committee before the end of the semester for progress review.

### **Eighth semester:**

- Begin organization for your dissertation.
- Meet with your PhD committee before the end of the semester for progress review.

### **Tenth semester:**

- Normally all PhD students should be finished by the end of the semester. Formal notice in writing must be sent to the DGS two weeks prior to exam. This list should include a list of your committee members who will be in attendance, their e-mail addresses, and the time and location of your exam. Exams must occur while a term for which you are registered is in session unless prior approval has been granted by Leigh DeNeef, Associate Dean of the Graduate School.

### **Important Annual Deadlines**

- Progress review and Request for renewal of TA and Fellowship awards - Annually, before the end of the spring semester.
- Intent to Receive a Degree Form must be filed by January 25 for May graduation; by July 1 for September graduation; by November 1 for December graduation.

See also the timetables for oral prelim and thesis defense at the end of this booklet.

## GENERAL ACADEMIC INFORMATION

### Registration

New graduate students should arrive on campus during the week preceding the beginning of classes. Before registering, new students must consult with the Director of Graduate Studies and their advisor to plan their courses and obtain their Personal Identification Number (PIN) before registering. Registration after the student's first semester in residence is done via the internet using your Duke email ID during October/November (for the spring semester) and March/April (for the fall semester).

Copies of the school course schedule are available on the Nicholas School web-page or in the Enrollment Services office in A142. The university course schedule is available from the Registrar's Office and on the World Wide Web (<http://www.siss.duke.edu/>). Any changes to the school schedule will be posted on the administrative bulletin board (located on the left side of the school's main foyer) and will also be reflected on the Registrar's Office web site. It is very important to review this information carefully, particularly the university schedule, which provides information about the internet registration system (ACES). Keep all materials for future reference. To receive a PIN (Personal Identification Number), the student must meet with his or her faculty advisor. *Your advisor is the only person who can give your PIN to you.* If you would like to register for more than 15 units (an overload), you must obtain permission from the Graduate School. Please contact the Graduate Studies Program Office, A308, first.

PLEASE NOTE: All students (new and returning) must register for "**Continuation**" each semester. If you will be on Duke payroll during the summer term you must also register for "continuation" credit during the term for which you are paid.

As is indicated in the ACES booklet, graduate students may register during a number of time periods, but they have priority for undergraduate courses during the first period only. Therefore, if you plan to take undergraduate classes, you should register during the Graduate registration window.

To register for a course that requires an instructor's permission ("A" footnote in the university course schedule), students must obtain a permission number from the instructor prior to registering for the course through ACES. Instructors may use permission numbers to give priority in classes with limited space to students nearing graduation or who are only at the Durham campus for a limited time (e.g., CEM students).

*Courses in other schools.* To register for courses in the Fuqua School of Business or the Law School, students must obtain written approval and submit this to the Registrar's Office, 103 Allen Building. Approval to take Law School courses must be obtained from the Office of Student Services (2028 Law School, 613-7027); approval to take Fuqua School of Business courses must be obtained from Nancy Jo Black (286E Fuqua, 660-8079).

*Interinstitutional registration.* Registration for courses at the University of North Carolina or North Carolina State University cannot be done through ACES. The following steps are required: Please note that all interinstitutional registrations must be completed during the Duke time periods for registration. You must register and remain enrolled in an equal or greater number of credit hours at Duke as at UNC or NC State.

1. Complete an "Interinstitutional Registration Approval Form" (copies available in the Alumni Reading Room).
2. Obtain the signature of the Director of Graduate Studies on the form.
3. Submit, **in person**, the completed and signed form to the Registrar's Office, 103 Allen Building, who will add the course to your Duke record.

4. If permission to register for a course is required, you will need to obtain the permission from the instructor, take the interinstitutional form to the Registrar's office, and then take a copy of the form that they will give to you to the Registrar's Office at either UNC or NCSU.
5. If you decide to drop a UNC or NCSU course, you may do so using ACES but you must notify the Registrar that you have done so. This must be done during Duke's drop/add period. There are no exceptions to this policy.

Web sites for UNC and NCSU course information are as follows:

NCSU	<a href="http://www2.ncsu.edu/ncsu/reg_records/tracs.html">http://www2.ncsu.edu/ncsu/reg_records/tracs.html</a>
UNC	<a href="http://regweb.oit.unc.edu/registration.html">http://regweb.oit.unc.edu/registration.html</a>

*Auditing.* Physical education, applied music, and dance classes cannot be taken as audits. If you wish to take these classes, you must take them for academic credit. Other courses may be taken as audits. Audits may be added using ACES by first adding the course by the usual method, then using the Course Options feature to change it to an audit.

*Add/Drop.* Dates for add/drop are indicated in the "Academic Calendar" section of this handbook. These dates apply to dropping/adding courses at the University of North Carolina at Chapel Hill and North Carolina State University as well as at Duke. Students are cautioned to complete all course changes prior to the end of add/drop since schedule changes of any type (including changing from audits to for-credit and vice versa; changing from pass/fail to a letter grade and vice versa; etc.) are not allowed after add/drop. It is recommended that students log in to ACES to check their schedules prior to the end of drop/add to make sure that they are officially registered for the appropriate courses.

### **Center for Environmental Education /Continuing Education courses**

Please see the information for the courses and the registration for the courses at [www.env.duke.edu/cee.html](http://www.env.duke.edu/cee.html).

*Registration for continuing education courses.* Based on available space, Nicholas School of the Environment and Earth Sciences students may register for the four and one-half day intensive courses two weeks prior to the first day of the course. Students beyond their first year of study are given priority with last semester graduating students given first priority. Students must complete an add/drop registration form, have it signed by the Continuing Education Administrative Director and submit it to the Enrollment Services office. One unit of credit may be earned for each week of a continuing education course. However, graduate students should note that they may receive credit only for those courses that have been approved by the Graduate School; these are listed in the Graduate School bulletin. Students may not register for more than two continuing education courses in a semester without special permission from their advisor and the program administrator.

Information on continuing education courses and registration forms may be found in the Center for Environmental Education Office (room A135) or the Office of Enrollment Services (room A142).

## **Honor code**

The Nicholas School of the Environment and Earth Sciences advocates the highest standards of professional ethics and academic integrity. Students and faculty have developed an honor code for the School, which is distributed to all incoming students prior to matriculation and discussed during orientation. Its objective is to promote a society of students, faculty and administration which adheres to the highest standards of truth and honesty and is also based on mutual respect, trust and academic integrity. Each of its members is responsible for upholding the spirit as well as the letter of this code. The principle of the code is:

Academic achievement at the Nicholas School of the Environment and Earth Sciences (NSEES) will be marked by honesty, fairness, independence and conscientiousness. A member of this school will not take unfair advantage of others, will not perform acts which frustrate the scholarly efforts of others and will not take credit for the work done by others. Lying, cheating and stealing in the pursuit of academic endeavors will not be tolerated in the NSEES community. Students will oppose such behavior by confronting directly, in writing or in person, those who engage in such behavior; written communications may be signed or anonymous. Students will also report any academic dishonesty, in writing, to the appropriate faculty member and the Dean; students may use their own judgment about whether or not to name the alleged offender.

Student input to the honor code, whether revisions, suggestions for implementation, or discussion of its provisions is welcome at any time.

## **Assistantship payrolls, picking up checks**

Graduate students generally are paid monthly.

Monthly payroll checks are available for pick-up in room A245 in the LSRC or Lab 3 at the Marine Lab every month on the 25<sup>th</sup>.

Automatic deposit is available for monthly payroll checks. You may sign up for automatic deposit in A245. Additionally, arrangements can be made through the Bursar's office to pay outstanding balances on student accounts through payroll deductions. Payroll deduction forms are available in A245 LSRC.

## **Funding for conference travel**

*Eligibility:* Any graduate student enrolled in a Ph.D. granting program who has passed preliminary exams and is actively participating in a conference (i.e., presenting a paper or poster, or leading a discussion). Students are limited to one conference travel fellowship per fiscal year (July 1 - June 30). Students attending conferences during the academic year must be registered at the time of the conference. For summer conferences, students must be registered for the upcoming fall semester and have been registered for the previous spring semester.

*Terms of the Award:* The Graduate School will provide 70% of the cost of registration fees, primary travel, three nights lodging, and meals for four days (up to \$25 a day): the maximum amount to be paid by the Graduate School is \$500. If the student has received a non-departmental grant for travel, this amount must be deducted from the request. NSEES will provide the other 30% of the cost (maximum \$300).

*Reimbursement:* Save all original expense receipts. When you return from the trip, submit a Travel Expense Voucher first to the School and then to the Graduate School for signature on the appropriate fund codes. The Travel Expense Voucher must be submitted not later than one month

from the date of the conference. If an advance is needed on this grant, please submit a Travel Advance Form to the Bursar's Office through the School.

Conference travel fellowship application forms may be picked up from the Graduate Studies Program office, A308 or in the Graduate Student Files, Lab 2, at the Marine Lab.

## **Examinations**

The university schedules a week at the end of each semester in which exams will be given. The method by which the exam is given is set by the course instructor. Some instructors will not give exams during exam week while others may give take-home exams. Another option is for the instructor to give the exam during the university scheduled time and date that is set each semester. As an alternative to these options, an instructor may choose to allow students to take their exams on a self-scheduled basis.

Self-scheduled exams can be taken any time between the hours of 8:30 a.m. and 5:00 p.m. Monday through Friday of the exam week. Students pick up and take their exams in a room designated for this purpose. Students serve as exam monitors to assure that the school and university honor codes are upheld and that any special requirements are followed. It is the responsibility of the course instructors to inform students by which method they will be given exams.

## **Graduation**

Duke University graduates students at three times during the year: the end of the spring semester (May), the end of the summer (September), and the end of the fall semester (December). Graduate students must submit their online *Intent to Receive a Degree* form on the Graduate School webpage: <http://www.gradschool.duke.edu/intent/degreere.htm>. Deadlines for submission of this form are January 25 for the May graduation, the first of July for the September graduation, and the first of November for the December graduation. Students planning to graduate at one of these times should consult the Graduate Studies Program office for the exact deadline date for a specific graduation.

While Duke graduates students at three times during the year, there is only one commencement ceremony. This is held at the end of the spring semester. Students who completed their degree requirements in the previous September and December are invited to participate in this commencement ceremony.

The Nicholas School of the Environment and Earth Sciences holds its own graduation ceremony the day before the university's ceremony in May. Professional students are recognized by their advisors and diplomas are personally presented at this time. Graduate students are also recognized by their advisors, but their diplomas are presented after the Graduate School ceremony on Sunday.

Students must have completed all graduation requirements in order to march or be recognized in any university graduation ceremony. All graduate students who have completed their degree requirements are strongly encouraged to participate in both the university and the school commencement activities. While students who have not completed all degree requirements are welcome to attend the school's graduation activities, only those students who have completed all degree requirements will be formally recognized.

## **Transcripts**

During the first semester of enrollment at Duke, all students pay a transcript fee. This entitles students to an unlimited number of transcripts of their work at Duke. Requests for transcripts must be made to the University Registrar's Office, 103 Allen Building.

The Nicholas School of the Environment and Earth Sciences is not authorized to release copies of transcripts to students. This includes transcripts from institutions previously attended that are submitted with applications for admission as well as transcripts for work done at Duke. Students are encouraged to obtain copies of these transcripts for their personal files to use for job applications from the University Registrar's Office.

## **Complaints/problems/suggestions**

The Student Advisory Committee (SAC) provides a means of bringing school-wide academic concerns to the attention of the Office of the Dean and to the NSEES Education Committee. Members of SAC are elected by the student body each year. Individual students needing help resolving academic problems are encouraged to work with their course instructors, their advisors, and the Director of Graduate Studies.

## **Harassment Policy**

Harassment of any kind is not acceptable in the Nicholas School of the Environment and Earth Sciences or at Duke University. It is inconsistent with the University's commitments to excellence and to respect for all individuals. Duke University is committed to the free and vigorous discussion of ideas and issues, which the University believes will be protected by its harassment policy.

Harassment is described by Duke University as the creation of a hostile or intimidating environment, in which verbal or physical conduct, because of its severity and/or persistence, is likely to interfere significantly with an individual's work or education, or affect adversely an individual's living conditions on campus. Sexual coercion is a form of harassment with specific distinguishing characteristics. It consists of unwelcome sexual advances, requests for sexual favors or other verbal or physical conduct of a sexual nature when submission to such conduct is made either implicitly or explicitly a term or condition of employment; or submission to or rejection of such conduct by an individual is used as the basis for employment or educational decisions affecting the individual.

Members of the Nicholas School of the Environment and Earth Sciences community who have questions about the policy or how to deal with a suspected violation can obtain a copy of the policy and options for resolution from the Office of the Vice President for Institutional Equity, room 0044 Bryan Center.

## GENERAL GRADUATE STUDENT INFORMATION

Every graduate student should carefully read the **Registration** and **Regulations** sections of the **Bulletin of the Graduate School**. They state the minimum requirements and time deadlines for the several graduate degree programs. The student is responsible for seeing that they are met. The purpose of this manual is to amplify and clarify the regulations and to indicate the instances in which the School of the Environment's requirements exceed the minimum requirements of the Graduate School.

### Director of Graduate Studies

The Director of Graduate Studies is the faculty member responsible for all records and matters pertaining to graduate students (PhD, MS, AM), and for liaison between the School of the Environment and the Graduate School. For the 2002-2003 academic year, students whose advisors are located in the Levine Science Research Center, the Director of Graduate Studies is **Dr. Kenneth Knoerr**, ([dknoer@duke.edu](mailto:dknoer@duke.edu)) A309A LSRC. For students in the Earth and Ocean Sciences Division, the Director of Graduate Studies is **Dr. Lincoln Pratson**, ([lincoln.pratson@duke.edu](mailto:lincoln.pratson@duke.edu)) 203 Old Chemistry. Graduate students at the Marine Lab should address their questions to **Dr. Dan Rittschof**, ([ritt@duke.edu](mailto:ritt@duke.edu)) room 310 BRL.

***All routine communications with the Graduate School should go through the Director of Graduate Studies for his or her review and endorsement.*** The purpose of this requirement is to insure the student's conformity with the regulations and deadlines of the Graduate School and to maintain our own graduate student records.

With adequate lead-time, the Director of Graduate Studies will remind each graduate student and advisor of the Graduate School deadlines (if any) that have to be met during each semester. If any problems are anticipated in meeting these deadlines, the student's major professor should immediately inform the Director of Graduate Studies so that he or she may request an extension of time from the Graduate School.

### Registration

There are major ***differences in the registration requirements for the MS/AM and PhD degrees*** as defined under the following sections for each of these degree programs. For the two master's degrees, full-time registration is still directly coupled with the number of course credits taken each semester. For the PhD degree, full-time registration has become uncoupled from the number of course credits. Therefore, students planning to earn an MS degree en route to the PhD should be certain that they will have registered for the required minimum of 30 units by the end of the semester in which they expect to receive that degree. Students who intend to receive an intermediate master's degree should consult with the Director of Graduate Studies at the beginning of their program to make certain that they fully understand what they have to do.

Each graduate student is also required to ***register for "Continuation" for each semester*** (whether or not they are physically in residence) until they receive their degree. **Students who receive financial stipends during the summer must also register for summer "Continuation"**.

***Leaves of Absence*** (for periods up to one year) may be granted for personal reasons or for medical necessity. A request for this leave must be endorsed by the student's major professor and director of graduate studies and submitted to the dean of the Graduate School for consideration prior to the beginning of the semester for which the leave is requested. If the student finds it necessary to extend the leave of absence beyond one year, a request for a renewal of the leave must be submitted. Leaves of absence do not waive the time limits that apply to the various degrees.

## Transfers between the School of the Environment and the Graduate School

Occasionally, students who initially enroll in the MEM/MF programs change their objectives from a professional degree to a research degree. Subsequently they request transfer to and acceptance in our program in the Graduate School. With the approval of their principal faculty advisor and the School of the Environment, it is possible to transfer to the Graduate School. However, there are some costs associated with this transfer that students should be aware of. No credit units can be transferred to the PhD program from the graduate program of another school unless it is from a completed degree. Six (6) units can be transferred into a Graduate School master's program from any other graduate program at Duke University, but there are still some potential financial costs associated with this transfer that need to be clarified through consultation with the Director of Graduate Studies. Realistically, students should only consider a transfer to a degree in the Graduate School during their first year in the School of the Environment. After that, it is best to complete their professional degree first. Professional students contemplating such a transfer should consult with the Director of Graduate Studies as soon as possible.

## Grades

***To remain in the graduate program, students must have passed all course work during the first year of graduate studies with a grade of G- or better*** (Note that the Graduate School leaves the determination of the minimum satisfactory grade requirements up to the discretion of each department or school).

***Grades of S+ (or C+ if an undergraduate course) or lower are not indicative of satisfactory performance*** in the graduate school. If a student receives one such grade, he or she will receive a written warning from the Director of Graduate Studies. A second S+ (or C+) or lower grade will require a meeting of the student's committee to discuss this less-than-satisfactory progress.

An ***incomplete grade (I)*** must be made up within the time specified by the instructor (in no case can this exceed one calendar year after the I is entered unless an extension is approved by the Dean of the Graduate School).

A ***student who fails a course*** in the major field normally is asked to withdraw from the Graduate School not later than the end of the current semester. Cases of failure are first discussed by the student's committee and a recommendation is referred to the Dean of the Graduate School. If the student fails a minor subject course, the Director of Graduate Studies will notify the major professor and the student will, at a minimum, with the concurrence of the Dean of the Graduate School, be placed on academic probation.

## English language proficiency requirements for international students

All international students whose native language is not English must demonstrate their English proficiency either through examination or by enrolling in Graduate Studies 200 A & B during their first year in residence. International students should consult the Admission Procedures section of the current Bulletin of the Graduate School for clarification of this requirement. In most cases a degree from an accredited English language institution is accepted as demonstration of English proficiency.

## Financial aid

The majority of graduate students receive some form of financial aid. This includes School of the Environment teaching/research assistantships, endowed fellowships, foundation and other private support as well as various research and training grants. The following discussion is concerned primarily with financial aid provided through the School of the Environment. Students who receive financial aid from other sources should consult the information provided with the financial award.

**Teaching Assistantships.** Some incoming students are awarded a teaching assistantship (TA) in the form of a stipend paid by the School of the Environment. If this is the initial form of financial support, students will usually transfer after several years to a research assistantship (RA) provided by research grants or other sources obtained by the student's major professor. During the period of the teaching assistantship, the stipend is paid in nine equal installments on the 25<sup>th</sup> of each month, September through May. Terminal master's students do not normally receive assistantships from the School of the Environment.

**While receiving a school-funded TA, students** are expected to devote their major effort on course work and research and **are required to serve each semester as a teaching assistant.** The duties of a teaching assistant require about 12 to 15 hours per week and involve assisting instructors with such tasks as grading, infrequent lecturing, leading discussion and/or lab sections, and general course administration. This requirement is intended to benefit both the school (by providing teaching support) and the student (by gaining experience from the various responsibilities of teaching).

**Research Assistantships.** Research assistantship awards provide opportunities for graduate students to assist faculty members in some aspect of their research program. Usually much of the work done on such an assistantship will be utilized by the student for his/her own dissertation research. Such responsibilities require approximately one-half time work during the nine month academic year. If faculty members have funds available they provide full time summer research assistantships for their students who have a regular academic year TA or RA.

**Loss of assistantship.** Failure on the part of the student to carry out assigned duties properly, academic failure, or lack of satisfactory progress in the degree program constitute reason for withdrawing the assistantship award at the end of any given semester. This is a decision made by the School of the Environment faculty based upon a recommendation from the student's major professor.

**Tutoring.** No student may tutor for pay in a course in which he or she currently assists.

**Tuition awards.** Graduate students receiving teaching/research assistantships typically receive a tuition award that covers the required full-time tuition, the several required fees and health insurance for the normal five-year period of support.

***Guidelines for other employment.*** At the option of an individual professor, a student may receive a supplement during the summer for work relevant to their doctoral research paid for by the professor's research grant or other sources. However, full-time students in residence are encouraged not to accept outside employment during the course of their graduate studies due to the time commitment required by the academic program. ***If students elect to accept outside employment that results in an extension of the time required to complete their degree, they are likely to receive unfavorable consideration in any request for additional financial aid from school resources.***

***Financial support from other sources.*** Students who receive assistantships or traineeships from another program within the university or from any other source, should notify the Director of Graduate Studies and are responsible for consulting those programs for any additional requirements.

### **Progress review and request for renewal of financial awards**

***An annual review of the progress of each student*** toward meeting their degree requirements will be made by the members of the student's committee. The student will provide them a brief written account of progress, including a statement on completed course work and research. After reviewing these, the committee advises the student on future course work, research approaches, and the overall program. **The chair of the student's committee will provide a written summary report of this review to the Director of Graduate Studies.** If the student is receiving a financial award through a teaching or research assistantship, the report should include ***a request for a renewal of the assistantship*** for the following year on a form provided by the Director of Graduate Studies. This progress review meeting should be held before the end of the spring semester to confirm assistantship renewal for the following academic year. ***The request for renewal of the assistantship must be completed no later than April 20<sup>th</sup>.***

***If the student is not making satisfactory progress,*** the committee should recommend corrective action. In extreme cases, the committee may recommend that financial support be withheld from a student not showing adequate progress, or that the student be barred from further study in the School.

### **Research in absentia**

Students who will be away from campus for an extended period (a semester or longer) in the conduct of their research, should notify the Director of Graduate Studies and provide the Graduate Office with information on how to contact them, if necessary. As indicated above, students must remain registered when they are away from campus.

### **Time limitations**

Time limitations set by the Graduate School are important and will be enforced. See the current Bulletin of the Graduate School. It is especially important that the student be aware of the following regulations as defined in the Bulletin of the Graduate School: (a) Time limits for completion of the AM, MS, and PhD degrees; (b) Time limits for taking the preliminary examination and (c) Time limits for filing the Intention to Receive a Degree Form, submitting the thesis or dissertation and for taking the final examination.

## GRADUATE DEGREE REQUIREMENTS

### THE MASTER'S DEGREE

#### The MS degree

The MS degree is a research degree. It is normally offered **only** as an intermediate degree to the Ph.D. It requires the submission of a thesis based on original research. Thirty units of credit constitute the minimum enrollment for the Master of Science degree. The student must present acceptable grades for a minimum of 24 units of graded graduate courses. Of these, at least 12 units must be in the major subject. A minimum of 6 units must be in a minor subject or in related fields that are approved by the student's committee. The remaining 6 units of the required 24 may be taken in the major or related fields. A maximum of 6 units of research may be earned by submission of the thesis.

#### The joint AM/JD degree

An agreement with the Law School permits a student to earn both our AM and their JD degrees in three years and one summer. During this period students must register for 30 units (at least 24 graded) in the School of the Environment in the Graduate School and pass a comprehensive examination. All tuition is paid to the Law School, which transfers the tuition necessary for the AM degree to the Graduate School.

#### MS in Statistics

The Institute of Statistics and Decision Sciences (ISDS) offers students enrolled in any program in the Graduate School the opportunity to earn a MS in statistics en route to receiving the PhD degree. To earn this degree, students must take an additional 18 graded units in approved statistics and related courses and write a master's thesis (which may actually be part of their PhD dissertation). More information about the requirements for this degree and application forms for admission to this program are available from ISDS. If you opt to get an MS degree in ISDS, you will not be able to get one in the School of the Environment, too. Current information about this degree is posted on the Institute of Statistics and Decision Sciences website at: <http://www.isds.duke.edu/>

#### Bypassing the master's degree en route to a doctoral degree

A student holding a BS or BA degree need not become a candidate for a master's degree, although work for the master's degree is often excellent preparation for the PhD. The decision to go directly for the PhD degree is to be made in consultation with, and with the approval of, the major professor. If a doctoral student expects to also receive a MS degree, the Director of Graduate Studies should be notified during the first semester of the student's residence. Doctoral students intending to do this should very carefully read the sections of this manual on **Registration** for both masters and doctoral students.

#### Registration

*Tuition for terminal master's students is directly coupled to registration.* Full-time registration is 12 units. Since the minimum requirement for the master's degree is 30 units, students usually register for 12 units for each of their first two semesters and 6 units during their third semester. Students must also register for continuation for every semester until the receipt of their degree.

***Tuition for doctoral students seeking an intermediate MS degree is not directly coupled with registration*** (see section on Registration under the PhD degree). Full-time doctoral students may register for less than 12 units of course work. However, to meet all the credit and time deadlines for both the master's and the doctoral degree, students normally register for 12 units during their first two semesters in residence. Doctoral students intending to receive the intermediate master's degree are encouraged to fully discuss their proposed schedule with the Director of Graduate Studies at the beginning of their graduate program.

### **Committee members**

The committee to examine a student for either the MS or AM degree normally consists of a minimum of two faculty from the School of the Environment and one external person (from another department at Duke or from another institution). Based on recommendations from the major professor, the Director of Graduate Studies will request appointment of this committee during the student's second semester of residence. This will permit adequate time for input from all committee members to the student's program prior to the final examination. In the event that a student is continuing for the PhD degree, at least one additional committee member will be added at the appropriate time.

### **Time limits**

The time deadlines, for filing an Intention to Receive a Degree Form and for submitting a thesis for the semester in which the student intends to graduate, are clearly stated in the Bulletin of the Graduate School. All students are expected to be familiar with and abide by these deadlines.

A student in continuous residence is expected to complete all requirements for the master's degree within two calendar years. An extension beyond this time requires a satisfactory explanation submitted to the Graduate School through the Director of Graduate Studies. The maximum time limit for completion of the masters degree is six calendar years from the student's initial registration in the Graduate School.

To meet the time deadlines for their program, doctoral students seeking an intermediate master's degree must normally satisfy all the requirements for this degree within two years if they are in continuous residence. Failure to do this will usually be considered as strong evidence that they should not be permitted to continue doctoral study at Duke University.

## THE PhD DEGREE

### The PhD degree

The PhD degree is a research degree. Its basic requirements are: (1) payment of six semesters of full-time tuition (or five if financial credit is approved from a previous masters degree), (2) major and related (minor) courses, (3) a supervisory committee for the student's program of study, (4) foreign language (optional), (5) residence, (6) preliminary examination, (7) dissertation, and (8) final examination.

### Registration and tuition

*Beginning with the 1994/95 academic year*, registration and full-time tuition payments became uncoupled for the PhD program. ***Doctoral students starting that year or later*** may take as many or as few courses in any one semester as they and their committee deem desirable without any effect on their full-time tuition. ***Therefore, ungraded research credit should no longer be used to raise registration to a minimum of 12 units.***

***Graduate students who began their PhD program prior to the 1994/95 academic year*** are required to register (and complete) a minimum of 60 units of course credit. For them, registration and tuition are still directly coupled and ungraded research credit should be used to satisfy the total minimum registration (and tuition) requirement. If they have a prior master's degree, they can request that 15 units from that degree be transferred toward the 60 unit requirement.

Doctoral students who come under the new system are required to pay six semesters of full-time tuition (five with financial credit from a master's degree completed at another school). The Graduate School does not require a specific number of course units in the major field. The specific major course requirements are left to the discretion of each department of school. However, the Graduate School does require two courses in a minor subject or in related fields that are approved by the student's committee. **The Graduate School no longer places any restriction on the number of undergraduate courses if they are approved by the student's committee.**

### Major and related (minor) courses

Students are urged to take advantage of the opportunity to broaden their scientific knowledge and skills while in graduate school. The course work required by the supervisory committee is best viewed as the minimum course requirements. The School of the Environment requires that all PhD students complete at least six graduate-level courses while registered as a Duke student before the final exam. Independent study and tutorials do not count toward this six-course requirement. Two graduate-level courses of comparable coverage may be substituted by incoming students who have earned a master's degree elsewhere.

Normally, at least three of the required courses must be in the School of the Environment. The other required course must include a minimum of 6 units ( two courses) in a minor or related field approved by the minor representative to the PhD committee.

On rare occasions, and only for an exceptional student with considerable prior preparation in their major and minor fields, some or all of the course work requirement can be satisfied by an examination (see comments under Preliminary Examinations). This is certainly not the normal way of satisfying this requirement.

## Committee members

Upon acceptance, students are assigned a major professor based on mutual interests. ***Early in the student's third semester in residence, the Director of Graduate Studies, based on the recommendation of the major professor and in consultation with the student, forms a PhD committee consisting of four or more persons.*** This supervisory committee normally consists of at least three members of the School of the Environment (including the major professor) and a minor or external representative. The requirement for three members from our school can be satisfied by committee members with primary, secondary or adjunct appointments. When desired, a fifth committee member may also be appointed, including faculty from other departments or institutions or scientists from appropriate research organizations.

For doctoral students pursuing an intermediate master's degree, the initial committee will consist of only three members, including two from the School of the Environment and the minor or external representative. At least one additional member will be added after the master's degree is completed.

***Changes in committee membership*** may be made for reasonable causes (e.g., sabbatical leaves, termination of employment, retirement, etc.). Such changes require letters from the Director of Graduate Studies to the Dean of the Graduate School and to the committee member(s) being replaced. The request is initiated by a note from the major professor to the Director of Graduate Studies. ***If sickness or other unavoidable reasons require last minute changes in the examining committee membership (for either preliminary or final examinations), the Graduate School must be notified of these changes in advance of (not after) the examination.***

## Certification

After the PhD committee is appointed, a certification meeting is held during which time the program of study leading to completion of work for the PhD is determined and approved (e.g., courses required or recommended, projected testing dates, and tentative thesis topic). ***This certification meeting must be held during the third semester prior to registration for the fourth semester. A copy of the approved program, signed by the committee, must be filed with the Director of Graduate Studies on a form provided by his or her office.*** If changes in the program become necessary, a written request for modification must be signed by all members of the committee and submitted for approval to the Director of Graduate Studies.

## Teaching requirements

PhD candidates are expected, as part of their graduate education, to serve at least one semester as a teaching assistant, usually in an introductory course. Students who receive teaching/research assistantships satisfy this requirement as part of their financial aid responsibilities. However, students who have other forms of financial aid must still serve for one semester as a teaching assistant. This assignment may be taken any semester, but it is recommended that it be completed before the preliminary examination.

## Foreign language requirement

The Graduate School and the School of the Environment do not have a specific language requirement. However, individual PhD committees or major professors may require a student to demonstrate evidence of a foreign language proficiency if it is necessary for the conduct of their research.

## Residence

The minimum residence for the PhD degree is one academic year of full-time registration at Duke (that is, two consecutive semesters of full-time tuition).

## Advancing to doctoral candidacy/preliminary examinations

Prior to becoming a doctoral candidate, each student working for the PhD must demonstrate (1) a basic knowledge of their field, and (2) a readiness to do research.

The student, in consultation with their PhD committee, may propose and complete a specific program of courses that provides the necessary background knowledge for requirement 1. Proficiency is demonstrated by passing a written examination in a subject area or by passing the pertinent courses with a grade of G- or better. A combination of courses and examinations may be chosen. All course work to satisfy these preliminary requirements must be approved by the student's committee and should normally be completed by the end of the fifth semester in residence.

The Graduate School requires a formal preliminary examination but leaves the character of this examination up to the individual department or school. The School of the Environment requires an oral examination. In addition, the student's committee may also require a written examination. No student is considered a candidate for the doctoral degree before passing the oral or combination exam. ***This examination should normally be taken by the end of the fifth semester.*** If a student has not passed the exam by the end of the third year, a statement explaining the delay and setting a date for the examination must be filed with the Dean of the Graduate School through the Director of Graduate Studies. Except under unusual circumstances, extension will not be granted beyond the sixth semester. *If this time limit is not met or extension is not granted, the Graduate School will not approve further registration.*

By the time that the preliminary examination is passed, any courses or other credits for advanced standing that are more than six calendar years old will not be accepted toward fulfilling the minimum requirements of the doctoral degree.

## Oral preliminary examination/research proposal defense

The oral preliminary exam is intended to determine the student's readiness to do research (including a clear understanding of the relevant theory and research methodology) and the soundness of their proposal. **At least one week before the oral exam, the PhD committee should be presented with a 10- to 15-page paper outlining the proposed research topic, its relationship to existing knowledge (including a brief literature review), the hypothesis to be tested, and the methodology to be used.** The National Science Foundation doctoral dissertation improvement grant format, which is available in the university's Office of Research Support, is a very good guide for preparing the proposal. The proposal must be approved by the major professor before distribution to the committee members. This paper will serve as the *starting point* for the oral exam, but the exam content is unrestricted. ***A copy of this research proposal should also be filed with the Director of Graduate Studies one week before the exam.***

***The student should contact the Director of Graduate Studies in writing at least two weeks in advance of the desired time and date for the examination. The Director of Graduate Studies has the formal responsibility for contacting the committee members to schedule this examination.*** Preliminary exams may be scheduled in the summer with the

agreement of the committee and if the student is registered for the summer session. Only one substitution may be made in the committee for an exam if required by summer scheduling.

**Successful completion of the exam requires the affirmative vote of the committee chair and not more than one negative vote.** The vote to pass or fail the student is done by secret ballot. Should a student fail the oral examination, the committee may recommend to the Graduate School that the student be granted the privilege of a second examination, to be taken no sooner than three months after the date of the first exam. The vote of the committee at a second exam must be unanimous. Failure on the second exam terminates eligibility for further work on the PhD degree at Duke University. Upon successful completion of the exam, the student advances to PhD candidacy.

## Dissertation

The student's research for the PhD is guided by the major professor in consultation with the PhD committee. *This committee should meet a minimum of once per year to review the student's progress in the doctoral program. A written summary of this meeting must be submitted to the Director of Graduate Studies by the committee chair.*

*The title of the student's dissertation must be submitted to the Graduate School on an Intention to Receive a Degree Form* at least one month before it is presented to the committee prior to the final examination (see current Bulletin of the Graduate School for specific submission date requirements).

*A school seminar on their research will be presented by the student prior to the final examination* and, preferably, after the rough draft has been submitted to the PhD committee.

*All members of the student's committee must be given the opportunity to read a draft copy of the dissertation at least a week before it is submitted for the final examination.* This insures that they are able to comment on the dissertation while it is still in draft form. *The final copies of the dissertation must be submitted to the Graduate School at least seven days before the final examination.* A copy of the "Guide for the Preparation of Theses and Dissertations" is available from the Director of Graduate Studies.

## Final examination

The final examination provides students the opportunity to defend their dissertation at an oral examination conducted by the PhD committee. *The student should contact the Director of Graduate Studies in writing requesting the scheduling of this exam at least two weeks in advance of its proposed date. The Director of Graduate Studies has the formal responsibility for contacting the committee members about the examination and for notifying the Graduate School of its scheduled time, date and location .*

**Successful defense of the dissertation requires the affirmative vote of the committee chair, and not more than one negative vote.** The vote to pass or fail the candidate must be by secret ballot. If the student fails the final examination, he or she may be permitted a reexamination with the approval of the director of the dissertation and the Dean of the Graduate School. The second examination may not be held sooner than six months from the date of the first. Failure in the second examination automatically bars the candidate from further work for the PhD at Duke University.

The final examination may be taken in the summer without prior Graduate School clearance if the committee members are agreeable. However, the exam must be scheduled and the student must be registered when the summer term is officially in session.

Following a successful defense, the final corrected copies of the dissertation must be submitted to 013 Perkins Library for binding within 30 days. If there are fewer than 30 days remaining in the semester in which the defense is taken, the student must check with the Graduate School to determine the deadline for submission of the completed dissertation.

### **Time limits**

The time deadlines, for filing an Intention to Receive a Degree Form and for submitting a dissertation for the semester in which the student intends to graduate, are clearly stated in the current Bulletin of the Graduate School. All students are expected to be familiar with and to abide by them.

A student in continuous residence is expected to complete all the requirements for the PhD degree within five calendar years (i. e., the dissertation should normally be submitted and accepted within two calendar years after the preliminary examination is passed). Should the dissertation not be submitted and accepted within four years after the preliminary examination, the candidate may, with the approval of the committee, petition the Dean of the Graduate School for an extension of up to one year. If the extension is granted and the dissertation is not submitted and accepted by the new deadline, the student may be dropped from candidacy.

If a student is dropped from candidacy, he or she must petition the Dean of the Graduate School to be reinstated. This petition requires the endorsement of the student's committee and the Director of Graduate Studies. The student must also pass a second preliminary examination to be reinstated as a candidate for the doctoral degree. In such cases, the time limit for submitting the dissertation will be determined by the dean of the Graduate School and the candidate's committee.

## **GENERAL SCHOOL/UNIVERSITY INFORMATION**

This information can be found under the following website address:  
<http://www.env.duke.edu/edprograms/index.html>

## CHECK LISTS AND TIME TABLES

### PhD Oral Prelim Checklist

1. Plan to take this examination before the end of your fifth semester of graduate study.
2. Contact the Director of Graduate Studies in writing at least two weeks in advance of the desired time and date for the examination. The Director of Graduate Studies has the formal responsibility for contacting the committee members to schedule this examination.
3. You may not take the Oral Prelim until your major professor says you are ready. The major professor does this by approving your research proposal for distribution to the PhD committee and the Director of Graduate Studies. Distribute the proposal at least one week prior to the exam.
4. The exam will be a maximum of three hours in duration. The committee initially meets for a few minutes without the student in order to discuss the organization of the exam. Students are then often requested to summarize their proposal verbally for the committee at the beginning of the examination.
5. When the student passes, the signed Preliminary Exam form is taken to the Graduate School by the student. **Please leave a copy of the signed form with the Director of Graduate Studies.**

Should the student fail the exam the committee will indicate whether a second exam will be allowed. A second exam cannot be held until at least 3 months have passed.

### Dissertation Submission and Defense Timetable

Submit and defend thesis within two calendar years after prelims. If the thesis is not submitted and defended within 4 calendar years, you may be dropped from the program or required to take prelims a second time. (Graduate School regulation)

File Intent to Receive a Degree Form: by January 25 for May graduation, July 1 for September graduation, or November 1 for December graduation; *and* at least one month before dissertation is presented.

At least 2 weeks before defense:

Circulate rough draft of dissertation to your committee (at least a week before submitting final copy to Graduate School).

Contact the Director of Graduate Studies in writing requesting the scheduling of this exam. The Director of Graduate Studies has the formal responsibility for contacting the committee members about the examination and for notifying the Graduate School of its scheduled time, date and location.

At least 7 days before defense *and* before April 16 for May commencement, or 1 week before end of preceding term for September or December commencement:

Produce final copy of dissertation, submit it to the Graduate School for format check and then distribute it to your committee.

Within 30 days after defense:

Submit dissertation with any revisions requested by your committee to 013 Perkins Library.  
N.B. for May commencement:

May 2 is the last date to complete requirements for an advanced degree. The final exam must be completed and the signed copy of the examination report card must be submitted to the Graduate School by 4PM. (Therefore if you defend at the latest possible date, you will have less than 30 days to complete any required revisions.)

N.B for September commencement:

If you defend your dissertation by May 2, you may graduate in September without registering for the summer term and paying fees.

## Thesis Defense Checklist

1. **Read the “Guidelines for Preparation of Theses and Dissertations”** available from the School’s Graduate Office. It is also a good idea to look over some recent theses to get ideas about organization, illustrations, etc.
2. **File an “Intent to Receive a Degree” form.** There is nothing binding about this. It simply alerts the Graduate School and the Nicholas School of the Environment and Earth Sciences of your intention to graduate. Thus, they can be sure you have accomplished everything necessary short of submitting a thesis. Check on the deadlines for submission of this form.
3. **Seminar.** You are required to give a seminar summarizing the results of your research prior to the thesis defense. This may be immediately before the exam or several weeks before the exam.
4. **Circulate a rough draft** to the members of your committee once you and your major professor are reasonably happy with the thesis. You should allow the committee a week to read it and you should allow yourself some time for incorporating their suggestions before taking the revised draft to the Graduate School for Susan Williford to check. After Susan Williford approves the format of the thesis it is given to the committee at least one week before the exam.
5. **Scheduling the Defense.** Prior to taking the thesis to the Graduate School for approval, contact the Director of Graduate Studies in writing requesting the scheduling of this exam at least two weeks in advance of its proposed date. The Director of Graduate Studies has the formal responsibility for contacting the committee members about the examination and for notifying the Graduate School of its scheduled time, date and location .
6. When you have SUCCESSFULLY COMPLETED THE DEFENSE,
  - be sure that the title page, the abstract cover page and the card from the Graduate School are all signed by the committee;
  - leave a copy of the signed exam card and title page in the School’s Graduate Office;
  - fill out an Alumni Data Sheet and return to the School’s Graduate Office.

CELEBRATE! CELEBRATE! CELEBRATE! CELEBRATE! CELEBRATE!