Environment, Ecology, and Energy Program (E3P)

University of North Carolina at Chapel Hill

ENEC Graduate Student Handbook and Orientation Guide



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UNC ENVIRONMENT, ECOLOGY, and ENERGY PROGRAM



INFORMATION FOR NEW GRADUATE STUDENTS

The information listed in the following pages is designed to provide specific Program related information as well as some general University information that may be helpful to new students.

Students are strongly encouraged to bookmark the Graduate School Website, <u>http://gradschool.unc.edu</u> for the duration of your enrollment. Graduate School guidelines, forms, funding and links to other related departments are all available on that site.

The Undergraduate Admissions Office (919-966-3621) offers student-guided walking tours of UNC's campus that are very helpful to newcomers. Tours run Monday through Friday at 10:00 am and 2:00 pm during the school year, with more variable hours in the summer. For more details go to: <u>http://www.admissions.unc.edu/Visit/default.html</u>.

I. PROGRAM LOCATION AND STAFF

The Environment, Ecology, and Energy Program (E3P) website is <u>https://e3p.unc.edu</u>.

The E3P mailing address is CB# 3275, 3202 Murray Hall UNC-Chapel Hill Chapel Hill, NC 27599-3135

E3P's physical office address is 3202 Murray Hall. The telephone is 919-962-1270, fax is 919-962-1254, and email address is <u>environment@unc.edu</u>.

The office of the **Chair**, Dr. Drew Coleman is 3202G Murray Hall and 325 Mitchell Hall. His telephone is 919-962-0705 and email is <u>dcoleman@email.unc.edu</u>

The **Director of Graduate Studies and Graduate Admissions** is Dr. Allen Hurlbert. His telephone is 919-843-9930 and email is <u>hurlber@bio.unc.edu</u>. He is physically located in Wilson Hall 331.

CEE's <u>Student Services Representative</u>, Violet Anderson, can be reached by phone at 919-962-1270 or by email at <u>vmanders@email.unc.edu</u>. Her office is 3202 Murray Hall. Violet manages student services and student payroll.

For accounting and business in the E3P, contact our <u>Department Manager</u>, Jennifer Parker, at 919-966-9256 or 919-966-4517 or by email at <u>jstacey@email.unc.edu</u>. Her office is in 3202 Murray Hall or 114 Mitchell Hall.

Other E3P faculty are appointed and housed in "home" departments (e.g., Anthropology, Biology, City and Regional Planning, Economics, Environmental Sciences and Engineering, Geography, Earth, Marine and Environmental Sciences, Public Policy, and Sociology). Prospective faculty are nominated for membership in the Program and elected by the Program faculty.

Up-to-date listings and contact information for E3P faculty, staff, and students are located on the E3P website.

II. FACILITIES AND SERVICES

A. Laboratories, Mailboxes, and Office Space

Laboratory and office space for students is generally provided within an advisor's home department. E3P has an office suite available for students who do not have office space in their faculty advisor's department; these offices are located in Mitchell Hall. E3P has a teaching laboratory located in 3302 Venable but does not provide research laboratory space. Research space is located with your advisor's research group.

E3P students may have mail sent to the office address listed above (CB #3275). Mail sent to this address will be received by the E3P Office Staff and held for student pickup. Students with a teaching assistantship in Biology will have an additional mailbox in Coker Hall. The Biology Student Services Coordinator (212 Coker Hall, 919-962-3391) can provide more detail on these mailboxes. Other departments may also provide mailboxes for E3P students upon request.

Newer buildings (such as Venable and Murray) may also access via swiping a UNC OneCard for after hours and on the weekend; contact the department manager to request access using the one-card and to obtain keys.

As needed, keys for access to Wilson and Coker Halls (the outside doors, student offices, and classrooms) are assigned through Biology and may be requested by contacting Jordan Simmons (B33 Wilson, 919-843-7336, <u>jdsimmons@bio.unc.edu</u>) and paying a refundable \$10.00 deposit. Students who require keys for other buildings should contact the administrative manager respective of the building's department.

B. Computing, ONYEN, E-mail, and OneCard

New students should sign up for access to the UNC electronic system as soon as possible (generally this is possible upon receiving a personal identification—PID from the university). Go to https://onyen.unc.edu to set up an ONYEN ("Only Name You'll Ever Need," the UNC login ID). This will also create an email address associated with the ONYEN (which will be onyen@live.unc.edu). Email aliases (such as creating a shortcut "onyen@unc.edu" address) and password management are also carried out through this website. Passwords must be changed annually.

The UNC email system (called HeelMail) is hosted by a Microsoft Outlook Exchange Server and may be accessed at <u>https://office.unc.edu</u>.

The UNC network (UNC-1) provides wired access in all buildings and wireless access around nearly the entire campus. Wireless access is available via eduroam (<u>https://incommon.org/eduroam</u>)

New students will require a UNC photo ID card (OneCard), which also serves as a library card, key card for certain buildings, and can be set up to pay for printing, campus dining, and used as a debit card as well. More information can be found at <u>www.onecard.unc.edu</u>. The OneCard office is on the lower level of the Student Stores Building, on South Road.

UNC pays site licenses for many common software packages, including ArcGIS and SAS. These are made available for free use while on campus, either by download or on CD. Go to http://software.sites.unc.edu for more information. In addition, many of these products come

pre-installed on university computers and computers bought by students through the Carolina Computing Initiative (CCI, <u>http://cci.unc.edu</u>), which also offers free maintenance, service, and repairs for university and CCI computers. Additional computing services are also available through UNC ITS (<u>http://its.unc.edu</u>), including remote VPN access to the campus network. The UNC Virtual Computing Lab (<u>https://vcl.unc.edu</u>) offers additional access to many software packages via remote desktop.

C. Transportation, Bicycles, and Parking

All Chapel Hill Transit buses are free. These are the blue buses. They have campus routes and are fairly ubiquitous throughout Chapel Hill and Carrboro; many students use them as their primary mode of transportation. Schedules are available at <u>http://chtransit.org</u>. Triangle Transit (the green buses) offers service linking Chapel Hill, Durham, Raleigh, and RDU airport (<u>https://gotriangle.org/</u>). Fares are charged for this bus, but students registered for UNC's Commuter Alternatives Program (CAP) may request a free yearly pass from UNC Department of Public Safety (<u>https://move.unc.edu/cap</u>) The CAP program also offers Park and Ride service to UNC for registered student commuters.

The Robertson Scholars Express bus offers fare service to and from UNC and Duke University for students and faculty, although OneCard identification may be required. These buses run on the hour and half hour from Duke Chapel and the UNC Morehead Planetarium parking lot (on Franklin St) M-F during the school year, and less frequently at other times. More information can be found at <u>https://robertson.express/</u>.

Bicycle racks are ubiquitous throughout campus and Chapel Hill/Carrboro. Bicycles must be registered with UNC Transportation and Parking(for free <u>https://move.unc.edu/bike/bike-registration/</u>.

Additional information related to parking and bus systems, including parking permits, may be obtained from the UNC Department of Transportation and Parking website (<u>https://move.unc.edu/</u>).

III. STUDENT FUNDING

A. Payroll and Benefits Information

Both research assistants and teaching assistants are paid monthly for the academic year, usually at the end of the month starting in August and continuing through the end of April.

Tuition and fees can be deducted from paychecks each semester by submitting the Graduate Student Payroll Deduction Authorization Form (see Section IX.D) to the Student Services Manager. Students on University payroll are also required to have their paychecks automatically deposited to their bank account by completing a Direct Payroll Deposit Authorization form in ConnectCarolina. Failure to submit these forms will result in not being paid and being forced to pay all fees upfront at the beginning of the semester.

Student health insurance is provided each semester with qualifying salary and course registration. The UNC-CH Graduate Student Health Insurance Plan (GSHIP) is administered by by Blue Cross Blue Shield of North Carolina. New students should submit enrollment form to the

Student Services Manager to be enrolled. The UNC Campus Health website contains additional information about insurance and on-campus health services for students (<u>http://campushealth.unc.edu</u>). Students who are new to UNC also need to be sure to submit the required Immunization and Health History Form. You can find information on this process at <u>https://campushealth.unc.edu/services/immunizations/</u>.

B. <u>Tuition</u>

On behalf of its students, E3P recommends to the Graduate School that they remit tuition for out-of-state students to the in-state rate while the student is employed as a teaching or research assistant. The graduate school then provides the student with an in-state tuition award. However, it is imperative (and required) that all E3P students apply for in-state residency as soon as possible, generally the spring of the 1st academic year, to be applied to the beginning of the 2nd academic year. The residency application is non-trivial, and students must take steps to become residents as soon as possible upon arriving on-campus (See Section IV, below). Out-of-state tuition remission is not guaranteed after the first year of graduate school. Tuition remissions are available when funds are available and only if the student is making a concerted effort to obtain residency.

In-state tuition awards are available to teaching and research assistants meeting the Graduate School criteria <u>https://gradschool.unc.edu/funding/stipends</u>/. Graduate School policy limits students to no more than 5 years (10 semesters) of tuition awards for Ph.D. students and 2 years (4 semesters) for master's students. This time limit begins during the student's 1st semester of full-time graduate enrollment. Students pursuing both a master's followed by a Ph.D. at UNC are still only eligible for 5 years of tuition remission (i.e., the clock does not "reset" upon finishing the master's and beginning the Ph.D.). For information about possible tuition support beyond the Graduate School limit, consult the E3P Chair.

C. Teaching Assistantships

Teaching assistants assist with the courses, recitations, laboratories, and undergraduate advising related to the undergraduate environmental majors and minors (ENEC), or in other constituent departments such as Biology and Geography. TAs are typically paid \$10,000 per semester for 15-20 hours' work per week.

Orientation/training sessions are held by the Center for Faculty Excellence (CFE, <u>https://cfe.unc.edu/about/our-services/grad-prof-students-postdocs/</u> or UNC Graduate School for new teaching assistants. We recommend new TAs take one of these training sessions as soon as possible. Biology TAs may also be required to attend additional training sessions offered by the Biology Department. Teaching Assistants are evaluated by their supervising faculty and students enrolled in the courses. Satisfactory performance as a TA is necessary to be offered an assistantship in subsequent semesters.

As with tuition support, assistantship funding may be available for 2 years (4 semesters) for master's students and 5 years (10 semesters) for Ph.D. students. This maximum is a Graduate School rule. For information about possible funding beyond the Graduate School limit, consult the E3P Chair. Generally, the E3P has been able to fund students as needed through TAs during their graduate career for bridge support or continuously, depending upon their individual situation.

D. Research Assistantships

Research assistantships may be available through a research grant held by a faculty member, typically the student's advisor. As with TAs, it is expected that RAs will devote 15-20 hours to research assistant activities per week. Support level varies with the funding source.

E. Graduate School Fellowships

The Graduate School annually awards single-semester Off-Campus Dissertation Fellowships, 1year Doctoral Dissertation Completion Fellowships, and other awards (<u>http://gradschool.unc.edu/funding</u>). The Student Services Manager generally distributes information about these (and other) awards to eligible students when the competition is announced, but it remains the student's responsibility to remain aware of internal award deadlines and application procedures.

F. Supplies and Travel

Budget permitting, E3P will help students with various research and meeting expenses, though generally not more than \$250-\$1000 per year. Students must make their requests in writing to the Chair. Funding is available on a first come, first serve basis.

Students can also apply for research and conference travel funds from UNC's Graduate and Professional Student Government (GPSG). These awards are generally offered in fall and spring every year, and students are eligible if they are presenting their research at a scientific meeting and they have *no* additional funding for the meeting (including grants to an advisor, etc.) GPSG's website <u>https://gpsg.unc.edu/funding/</u> has current award dates, which may also be announced in GPSG listserv emails and in emails from the E3P's GPSG student senator.

The Graduate School offers several funding opportunities annually and students are encouraged to review the following web link for possible sources that may suit their individual needs: <u>http://gradschool.unc.edu/funding/gradschool/currentstudents.html</u>.

IV. NORTH CAROLINA RESIDENCY AND TUITION WAIVERS

A. The Residency Application Process

Out-of-state students are expected to obtain in-state residency as soon as possible because the university's out-of-state tuition waiver funds are very limited (see Section III.B, above). Thus, it is important for students to take steps to secure residency as soon as they arrive in North Carolina. E3P strongly suggests that students obtain an NC driver's license, register vehicles in NC, register to vote, actually vote in elections, join the public library (Carrboro/Chapel Hill) and take part in other local organizations and activities. These changes should occur before the end of August of your first semester in Graduate School to receive the highest priority review from the residency committee. Waiting until September, or stretching your changes in residency out over several months, is considered a poor indicator of residency and you are likely to be declined. It also demonstrates to the E3P that you are not serious about the tuition remission requirements and will not receive a priority when we are selecting students for tuition remissions after the first year. Students can apply one year after "setting up residency" in NC (generally July or August after the 1st year). The online application and guidelines for in-state status are located on the graduate school's website (<u>http://gradschool.unc.edu/residency/index.html</u>), and the graduate school regularly offers workshops on the process. The Student Services Manager can also answer additional questions regarding the residency application.

B. NC Department of Motor Vehicles

In the case of driving and vehicle registration, there is a specific order of operations in which these residency tasks can be accomplished. First, valid car insurance and a valid NC home address are required before applying for a NC driver's license. A driver's license is required prior to NC vehicle registration. This often means getting insurance in the state and bringing this proof of insurance to the NC driver's license office. The nearest driver's license office is in Carrboro Plaza (104V, 919-929-4161), at the intersection of Hwy 54 and Jones Ferry Rd in Carrboro (2 mi west of campus). A paper quiz and a vision test are required for all new NC driver's license applicants (regardless of whether they already possess a license from another state). Note that the questions on the quiz are generally not intuitive, and a few minutes of studying really can be the difference between passing and suffering the time, expense, embarrassment of returning later to re-take the test. More information, including study materials and a checklist of required items to bring, can be found on the DMV website (<u>http://www.ncdot.gov/dmv/driver</u>).

Vehicle registration requires the NC license (and another ID), the title, and proof of insurance to be brought to the DMV registration place. All new residents of North Carolina must pay a one-time title and highway user's fee, plus a user's tax of 3% of the vehicle's wholesale value. The nearest registration office is located next to Staples on East Franklin Street in Chapel Hill (this is *not* the same location as the drivers license office!). All vehicles registered in NC also require an annual inspection (due immediately and then annually the month of registration renewal).

V. INTERNATIONAL STUDENTS

International students should consult with the Office of International Student and Scholar Services <u>https://isss.unc.edu/</u> for information on maintaining student visas and paying federal and state taxes. The Graduate School's Preparing International Teaching Assistants Program (PITAP, <u>https://careerwell.unc.edu/programs/pitap/</u>), is available to help international students meet their responsibilities as teaching and research assistants.

VI. REGISTERING FOR COURSES

Students may search the course schedule and register for most classes using UNC's ConnectCarolina system, accessed via <u>https://connectcarolina.unc.edu/</u> (requires ONYEN login). Research credits, thesis writing, and special seminar course listings are also available, but are usually registered with permission from a faculty member. The Student Services Manager will create these course listings upon request. Students should enroll in these courses under their major advisors (i.e., don't enroll in one of these courses under a different faculty member just because it happens to already be listed in the system!). Students should discuss courses with their major advisors prior to registering for classes. The Graduate Bulletin website contains a list of Ecology-related courses.

UNC students also have free access to courses offered at Duke and North Carolina State University (NCSU) by submitting an inter-institutional approval form (linked in Section IX.D, below). Duke and NCSU students have first access to their own courses, but it is still advisable to submit the form as soon as possible and to email the instructor ahead of time to ask to reserve a seat. Course listings for these universities can be found at the following websites:

- Duke: <u>https://registrar.duke.edu/registration/course-</u> catalog-schedule-classes/
- NCSU: <u>https://webappprd.acs.ncsu.edu/php/coursecat/</u>

VII. SEMINAR PROGRAM

E3P hosts monthly seminars during the academic year. The schedule for the semester is posted on the E3P website and announcements are generally also sent out by email. All students are expected to attend the seminars, and to meet with speakers either one-on-one or in groups when possible. The E3P Seminar Series is run by a committee of E3P graduate students that identifies speakers and organizes and hosts their visits. Suggestions for individual speaker invites are always welcome, as are volunteers to serve on the Seminar Committee. Ask your fellow graduate students in E3P how to get involved.

VIII. DEGREE PROGRAM RULES, REQUIREMENTS, AND POLICIES

E3P makes some specific degree requirements, as described below. In addition, the Graduate School Handbook and the Graduate School Thesis and Dissertation Guide outline more general UNC Graduate School guidelines and requirements <u>https://handbook.unc.edu/</u>. If E3P requirements change during a student's tenure at UNC, the student may choose to follow the rules in effect at the time of initial enrollment in E3P (i.e., be "grandfathered in"), or to adhere to any subsequent set of rules that may be implemented thereafter. The Graduate School Handbook and rules always supersede that of the home unit, E3P.

Appendices A–C contain the Plan of Study Guide, Timetable Charts, and ecologically relevant courses for use in course and research planning. Forms to record student progress and completion of degree requirements are linked in Section IX.D below, and are also available from the Administrative Manager and the Graduate School website. <u>Students should submit these</u> forms to the E3P Student Services Manager and to the UNC Graduate School at every major step in their degree progress (even if that means submitting the same form multiple times as new progress is made). In addition, students should make 1 copy for their own records.

Each student must be a very active participant in regularly maintaining contact with his or her Advisory Committee members. It is the student's responsibility to stay in touch with his or her major advisor and advisory committee. Although the faculty may be aware of student progress of their own accord, they may or may not remind students of all procedures/deadlines, etc. The student is ultimately responsible for ensuring that he or she complies with all E3P and UNC Graduate School requirements.

E3P takes the rules articulated below seriously. Failure to comply with these rules in a timely manner may be considered grounds for withholding student financial support.

A. Graduate Degrees Offered

The Environment, Ecology, and Energy Program offers a Ph.D. degree and two master's degrees: the Master of Science degree requiring independent research and a thesis, and the Master of Arts degree requiring a written report. All master's degrees are terminal degrees at UNC and master's students must request re-admission for Ph.D. work following completion of all requirements for the master's degree. However, students admitted to a Ph.D. program sometimes receive a master's degree during their graduate program, in which case a Recommendation to Proceed Beyond Master's Degree form should be submitted to the Graduate School (linked in Section IX.D, below).

B. Course Requirements

Every graduate student must gain an understanding of the breadth and depth of the field of Environment, Ecology and Energy as it is treated among various subdisciplines. This is accomplished in 2 ways: through the required ENEC 567 and 569 courses and through a course of study prescribed by the student's Graduate Advisory Committee. A list of E3P-approved courses may be found on <u>the UNC Graduate Bulletin website</u>.

For a master's degree a minimum of 30 hours of graduate credit is required, of which no fewer than 24 hours must be earned in regular courses (including ENEC 567 and 569) and at least 3 hours of which must be thesis writing credits (ENEC 992 or 993 for the MA and MS, respectively).

Ph.D. students must also take both ENEC 567 and 569, and must register at least once for at least 3 credit hours of Ph.D. writing credits (ENEC 994). There are no other specific course requirements for the Ph.D. except for those designated specifically by the student's Graduate Advisory Committee in the Plan of Study and as needed to complete Graduate School credit hour requirements.

Owing to the diversity of research methods and approaches within the field, the E3P has no explicit research skill course requirements for graduate degrees. However, the student's Graduate Advisory Committee is responsible for ensuring that the student has gained the proficiencies expected of a degree candidate in the student's selected area of expertise. Where courses are prescribed, this should be documented in the Plan of Study.

C. Graduate Advisory Committees

i. Initial Committee Meeting

By the end of the 1st semester, the student must assemble and meet with a Preliminary Graduate Advisory Committee (at least 2 members for a master's committee and 3 members for a Ph.D. committee). At its first meeting, the Preliminary Advisory Committee will evaluate the student's background through a Diagnostic Evaluation. This meeting is used to evaluate the student's initial background and skill level and determine appropriate course work and training.

ii. Plan of Study

Based on the Diagnostic Evaluation, the Preliminary Advisory Committee will work with the student to draft a written Plan of Study. This document should outline a timeline for completion of specific goals and research and coursework requirements for the student's degree progress. The Plan of Study should also make note of the student's existing skills and background and should commit both the student and the Committee to further the interdisciplinary spirit of E3P. An electronic copy of the Plan of Study must be forwarded to E3P's DGS for approval prior to completion of the 2nd semester. A copy should also be sent to the Student Services Manager for the student's file. Refer to Appendix A for a description of the suggested content and format of the Plan to Study document.

iii. Graduate Advisory Committee

The Graduate Advisory Committee must be expanded to full size (3 for a master's, 5 for a Ph.D.) by the end of the 3rd semester. Normally the Committee Chair and at least two others on the committee must be affiliated or adjunct members of the E3P faculty. The composition of the Advisory Committee must be submitted to and approved by the E3P Chair and DGS prior to being submitted to the Graduate School for approval. In addition, committee members from outside UNC must also be approved for a "fixed-term graduate faculty appointment" by the Graduate School before they can officially serve on UNC student committees. The Student Services Manager can submit the required paperwork as provided to her by the student. Approval of obviously-qualified individuals (e.g., Duke faculty) is generally a formality, but the process can take some time and so it is best make the request as soon as possible. Once assembled, the full Advisory Committee will be responsible for administering required examinations and evaluation of the thesis or report.

iv. Annual Meeting

Graduate students are required to hold at least one Graduate Advisory Committee meeting each academic year.

D. Annual Reports

Each student must submit (electronically) an Annual Report, together with an evaluation form signed by the student's Graduate Advisory Committee. The report should be 1-3 pages in length and summarize the student's progress over the previous year and plans for the coming year. Annual reports should be submitted during the final 3 months of the spring semester (March, April, May). A Graduate Advisory Committee meeting is the preferred means for presenting and evaluating the report, but is not required. For 1st-year students, the Plan of Study may serve as the Annual Report. See the attached form Annual Report template for a suggestion of important information to include.

E. Required Examinations – Master's and Ph.D. students

The following rules combined with the requirements for exams outlined in The Graduate School Handbook (<u>http://handbook.unc.edu/</u>) dictate E3P graduate examinations.

General Guidelines for Comprehensive Exams

- The M.S. comprehensive examination will be a written exam.
- Ph.D. students will take either an oral or written comprehensive exam.
- Ph.D. students will write formal dissertation proposal and will defend it orally.
- Students must be registered during the semester in which a comprehensive exam is taken.

• The Chair of the E3P Program or the Director of Graduate Studies will provide official answers regarding questions of interpretation of the exam rules for E3P.

i. The Master's Comprehensive Examination

Master's students will take a written comprehensive examination in his or her sub-discipline that is created, administered and graded by the student's Faculty Advisory Committee. This written examination must normally be taken within 24 calendar months from enrollment. A master's candidate who fails the written comprehensive examination may not take the examination a second time until at least three months after the first attempt. A student who fails an examination for the second time becomes ineligible for further graduate work. Upon request from the E3P Director of Graduate Studies, The Graduate School may grant the student a third and final opportunity to take the examination. In addition, no student may continue in the program or take an examination a third time without approval by the Administrative Board of The Graduate School.

The typical practice for the written comprehensive exam is to have each professor on the student's Faculty Advisory Committee submit questions to the major professor, who will administer the exam. The student should answer each committee member's questions in writing, and each professor will designate his or her questions as open- or closed-book. The time limit for the questions from a given professor is typically about 2 or 3 hours. Thus, an MS student will take three (or 4 or 5, if there are that many Advisory Committee members) individual exams, one from each committee member. This is usually conducted within a two-day period. Each professor will grade the student's answers to his/her questions, giving a grade of Pass or Fail on the questions. The subject matter in the questions can be anything from the student's academic program (courses or research), but the focus is usually on the student's research area. Ideally exams will be graded within one month and returned to the major professor to determine the single final exam grade.

A single exam grade is given. Possible grades are:

- 1. **Pass at the Ph.D. Level**. This means the student did an excellent job on the exam, showing clear understanding of most or all of the important principles in the various questions. The importance of this overall grade is that a student must achieve this grade on this exam if he/she might want to request an M.S. Bypass at some future time.
- 2. **Pass at the M.S. Level**. This means that the student did a completely satisfactory job on the exam, but his/her understanding of some of the important material was not at the level expected of a Ph.D. student, if the student had been in the Ph.D. track.
- 3. **Pass at either the M.S. or Ph.D. Level, but with conditions**. This would be the case if, as a result of the exam, something in the student's understanding was found to be in need of strengthening. This usually results in the student's committee requiring the student to do some additional reading or to take an additional course; to demonstrate improved understanding.
- 4. **Fail**. This means that the student did not demonstrate sufficient understanding of the principles covered by the exam questions. Following Graduate School rules, the student will have the opportunity to take the M.S. written exam again after a period of 3 months

has elapsed. Should the student fail the exam a second time, he/she may not continue in the graduate program unless the Department requests a special re-admission from the Graduate School. Please see the UNC Graduate School Handbook for additional details.

ii. Ph.D. Comprehensive Exam

Due to the interdisciplinary nature of the program and the sometimes-divergent expectations of disciplines for comprehensive exams, Ph.D. students may take either an oral or written comprehensive exam. The decision of which exam format will be used lies with the student and his or her graduate committee and must be the consensus opinion of that group.

Option 1: Oral Comprehensive exam -- Ph.D. students may take an oral exam that consists of the following:

- Two to 6 months prior to the oral exam, Ph.D. students meet with committee members to define focal areas within the student's field of specialty for which they will prepare.
- The oral exam will assess the student's ability to think critically about the literature within the defined focal areas.
- The student is responsible for scheduling the oral exam meeting at a time that is mutually agreeable to the student and his or her committee.
- The oral examination will last approximately 2 to 3 hours as the student responds to questions and comments by committee members.
- Advisory Committee members vote to give a grade based on the scale detailed above.
- A 2/3 majority is necessary for approval of a given grade.

Option 2: Written Comprehensive Exam -- Ph.D. students may take a written exam which consists of either of the following:

- A <u>Major Review Paper</u> based on the focal areas defined by the student in consultation with their committee. The review paper should be a focused a critical evaluation of the literature in their focal areas. The quality and depth of the paper should be that of a draft manuscript that could ultimately be revised to form the first chapter of the dissertation. The student will provide a detailed outline of the paper to the Advisory Committee at the beginning of the semester in which the written exam will be taken. The paper should be completed within two months. The committee must evaluate the paper within one month of its submission. A passing grade requires approval of 2/3 of the Advisory Committee.
- A <u>Written Comprehensive Exam</u> based on questions submitted to the Committee Chair. The typical practice for the written comprehensive exam is to have each professor on the student's Faculty Advisory Committee submit questions to the major professor, who will administer the exam. The student should answer each committee member's questions in writing, and each professor will designate his or her questions as open- or closed-book. The time limit for the questions from a given

professor is typically about 2 or 3 hours. Thus, the student will take five individual exams, one from each committee member. This is usually conducted within a threeday period. Each professor will grade the student's answers to his/her questions, giving a grade of Pass or Fail on the questions. The subject matter in the questions can be anything from the student's academic program (courses or research), but the focus is usually on the student's research area. Ideally exams will be graded within one month and returned to the major professor to determine the single final exam grade (grades are detailed above).

Comprehensive Exam Outcomes

A Ph.D. candidate who fails either the written or oral examination may not take the examination a second time until at least three months after the first attempt. A student who fails an examination for the second time becomes ineligible for further graduate work. Upon request from the E3P Director of Graduate Studies, The Graduate School may grant the student a third and final opportunity to take the examination. In addition, no student may continue in the program or take an examination a third time without approval by the Administrative Board of The Graduate School.

F. Master's and Ph.D. Proposal and Defense

Master's students are required to prepare a thesis proposal (or library report proposal, for MA students). Master's student's proposals are expected to be approximately 7-10 pages in length. Development of an acceptable proposal is often an iterative process, so students are strongly advised to present a preliminary proposal to the advisory committee before the deadline for approval. Approval of the research proposal is accomplished through a proposal defense that includes the entire Advisory Committee. For master's students, the proposal defense takes place during a committee meeting at which all members vote to approve or disapprove the proposal. The approved proposal (in digital form) and the approval form should be submitted to the Program office by the end of the 3rd semester. The approval form in this case is the Graduate School's Master's Comprehensive Exam Report, and approval is indicated in the section "Part II: Oral Examination or Approved Substitute".

Ph.D. students complete a written proposal and an oral defense of their proposal with their committee members. The proposal consists of:

- The scope of research that will constitute the student's proposal should be approved by the student's committee prior to beginning the dissertation proposal
- A written proposal that is expected to be no more than 15 pages in length (single-spaced). It should conform to formats of various funding agencies such as NSF, SSRC, NASA, NOAA, etc.
- The student will deliver a ~30 minute presentation to the entire Advisory Committee.
- Following the presentation, the committee will question the student regarding its content.
- Advisory Committee members vote to give a grade of pass, qualified pass, or fail on the student's dissertation proposal.

- A 2/3 majority is necessary for approval of a given grade.
- The results are specified on a dissertation proposal approval form signed by all members, which is submitted to E3P.

G. M.S. and Ph.D. Thesis or Dissertation Defense

There will be a final examination for either the M.S. or the Ph.D. degree (the thesis or dissertation Defense), and procedures for this are outlined in The Graduate School Handbook (<u>https://handbook.unc.edu/</u>). This exam is separate from the comprehensive examinations outlined above. It is required in addition to these other exam requirements. A defense will be in the form of an open seminar given by the student on the thesis or dissertation study, followed by a thesis or dissertation defense that is open only to the student's Advisory Committee. Students must be registered for a minimum of three credit hours of either thesis (ENEC 992) or dissertation (ENEC 994) during the semester in which the thesis or dissertation is defended.

H. Other Requirements

Residence credit of 2 semesters is required for a master's degree and 4 semesters for a Ph.D. The degree time limit from the date of registration for master's and Ph.D. students is 5 and 8 years, respectively.

IX. USEFUL RESOURCES

A. Academic Resources

E3P Website: https://e3p.unc.edu

The Graduate School: 919-966-2611, http://gradschool.unc.edu

UNC Libraries: http://www.lib.unc.edu

My UNC: <u>https://my.unc.edu</u>. The main portal to UNC's ConnectCarolina system for registration and online student services.

The Writing Center: 919-962-7710, <u>http://writingcenter.unc.edu</u>. Provides free consultation and support for all writing (papers, class reports, grants, etc.).

Grant Source Library: .. Provides resources, databases, and tutorials on grant applications and other funding.

Information and Technology Services (ITS): <u>http://its.unc.edu</u>. Provides software, IT advice and support, printing, and training in all things electronic on campus.

UNC Tuition and Fees: https://cashier.unc.edu/tuition-fees/graduate-programs/

UNC Academic Calendar: http://registrar.unc.edu/academic-calendar

B. Health and Wellness

Campus Health Services: 919-966-2281, <u>http://campushealth.unc.edu</u>. Provides Free and Confidential Services to UNC-Chapel Hill Students, individual evaluations and career counseling.

Campus Health also offers a number of behavioral and support groups; anxiety, relationships, grief, academic skills, sexual assault.

Campus Recreation: 919-843-7529, <u>http://campusrec.unc.edu</u>. Campus Rec offers personal fitness consultations and personal training, modern weight lifting, exercise, spa equipment, and a full range of aerobics instruction.

C. Student Organizations and Diversity

The Graduate School's diversity website: <u>http://gradschool.unc.edu/diversity</u>. Contains up-to date listings of multi-cultural/ethnic/LGBTQ and other diversity groups and opportunities on campus.

Student Organizations: <u>http://carolinaunion.unc.edu</u>. Carolina Union website, containing uptodate listings of several hundred officially recognized UNC-CH student groups.

International Student and Scholar Services: 919-962-5661, http://oisss.unc.edu

The Women's Center: 919-962-8305, http://womenscenter.unc.edu LGBTQ

Center: 919-843-5376, http://lgbtq.unc.edu

D. <u>Forms</u>

Graduate School Degree Progress Forms: http://gradschool.unc.edu/forms

UNC Payroll & Insurance Forms: <u>https://hr.unc.edu/employees/class-comp/payroll-forms/</u>. Specifically: Inter-Institutional Approval Form: (For registering in Duke or NCSU courses) <u>https://registrar.unc.edu/wp-content/uploads/sites/9/2020/03/Interinstitutional-approval-form.pdf</u>

APPENDIX A: GUIDE TO PLAN OF STUDY

UNC Environment, Ecology, & Energy Program

The degree requirements of the Environment, Ecology, and Energy Program require a written Plan of Study **by the end of the second semester**. This Plan should take account of your background preparation and goals for graduate study. It should be prepared in consultation with your 3-member advisory committee. The plan should commit you and your advisory committee to implement the interdisciplinary spirit of the Program. Our program requirements state that it will be "recorded in a standardized formation with a timetable," with a signed (by Primary Faculty Advisor) copy to be forwarded to the Program Chair. This document outlines the format you are to follow.

- 1. Your name, previous college degrees (with major/minor fields of study), list of related professional experience, Principal and Supporting Research Area in the Program, and 3person Advisory Committee.
- 2. Brief statement of your **goals** for graduate study. It should refer to the topical expertise and methodological techniques you expect to develop, and to your career aspirations (<1 page).
- 3. Brief description of your **existing preparation**, including previous course work, field or laboratory experience, professional work, etc. Develop your statement in light of your goals from section 1. Be specific; include only your relevant preparation (<1 page).
- 4. What **further preparation** is required in order to thoroughly prepare yourself for the degree? Your statement should cover, in order, the following objectives:
 - a. Topical expertise (content, and perhaps region as well)
 - b. Methodological expertise (including statistical and related techniques)
 - c. Specialized preparation for research (e.g., analytical techniques, language)
 - d. Professional training (e.g., teaching preparation, writing skills, etc.).

In each case you should describe the course work or other activities you will undertake in order to progress toward your scholarly goals (1-2 pages).

- 5. Keeping in mind the schedule of E3P requirements for course work, committee interactions, exams, etc. (Appendix B), prepare a tentative **timetable** for progress through the objectives set out in part 4. Use a Year/Semester format (<1 page).
- 6. Describe how your customized program of study addresses the interdisciplinary mandate of the Program. How do your objectives (section 4a-d) enhance the interdisciplinary nature of your degree? Please focus especially on your choice of materials for the Supporting Research Area: Does your Supporting Area complement or strengthen your Principal Research Area? Does your Supporting Area itself form a cohesive plan of study? (<1 page).</p>

Your advisory committee should be closely involved in the formulation and any subsequent modifications of this Plan of Study, both through your second-semester diagnostic exam and less formal meetings. You should consider your Plan of Study to be a contract among the Program, your Advisory Committee and yourself.

APPENDIX B: TIMETABLES OF DEGREE REQUIREMENTS

A. MA/MS Program

The following is a normal timetable for MA/MS Candidates. Copies of all exams, forms, and signed documents are to be submitted to the E3P office.

Yr/Sem Requirement R		eporting N	otes
1/Fall	ENEC 567		
	Assemble 3 member committee	Brief letter with all signatures to Chair, "Recommendation for Composition of Master's Advising Committee"	
1/Spring	ENEC 569		
	Committee meeting, diagnostic evaluation		
	Plan of Study	Signed copy forwarded to the Chair	See Appendix A
2/Fall	Continue course work		
	Written thesis or library report topic feasibility proposal	Written copy, signed by all committee members, forwarded to Chair	May be completed 1 semester earlier.
2/Spring	Written Comprehensive Exam	"Report of Written Comprehensive Examination for the Master's Degree"	
	· · · · ·	"Application for Graduation" and "Report of the Master's Degree Fina Oral Examination." If applicable, "Recommendation to Proceed Beyond the Master's Degree."	A MA/MS degree normally requires 2 to no more than 3 years.

APPENDIX B: TIMETABLES OF DEGREE REQUIREMENTS

B. <u>Ph.D. Program</u>: A normal timetable for Ph.D. candidates; copies of all exams, reports and signed forms should be submitted to the E3P main office.

Yr/Sem	Requirement	Reporting	Notes
1/Fall	ENEC 567		
1/Spring	ENEC 569		To be taken at some point in first 2 years
	Assemble 3 member committee	Brief letter with all signatures to Chair	
	Committee meeting, diagnostic evaluation		
	Plan of Study	Signed copy forwarded to the Chair	
2/Spring	Assemble 5 member committee	Brief letter with all signatures to Chair, in addition to Grad School Form, "Report of Doctoral Committee Composition"	Non-UNC faculty require "Recommendation for Fixed-Term Appointment"
	Comprehensive Exam (Either written exam [committee questions or review paper], or oral exam)	"Report of Doctoral Written Examination" or "Report of the First Doctoral Oral Examination"	
3/Fall	Written & oral dissertation proposal	Written copy, signed by all committee members, forwarded to Chair, "Report of Approved Dissertation Project"	May be completed during the 4th semester
4/Fall, Spring	Research/Writing		Timing is more flexible in this part of the program
5/Fall	Research/Writing		
5/Spring	Final defense (seminar and oral examination)	"Application for Graduation"	

Environment, Ecology, and Energy Program

Graduate Student Annual Report Form

Student's Name:

E-mail Address:

Advisor's Name: Semester & Year First Enrolled:

Current Support:TARAFellowshipOtherName the Fellowship if applicable:

If other, please describe:

What is the title (or topic) of your dissertation or thesis project?

Briefly describe the progress you have made toward completion of your dissertation or thesis during the past year:

List grant and fellowship for which you have applied during the past year and indicate the status (pending, declined, or funded):

List conferences you have attended and the title and type of presentation (oral or poster)

List publications for the past year:

List invited presentations you have made:

List other contributions to the Program (e.g., committee service, student organization):

List any honors or awards you have received: