Graduate Degree Requirements for the Ph.D.

1. Admission to Ph.D. Program for current UVA EVSC M.S. / M.A. Students – A student getting an M.S. or M.A. in our department who wishes to enter our Ph.D. program (either prior to or at the time of completion of the M.S. or M.A. degree) can do so by submitting a Degree Transition Form, which must be signed by the student’s anticipated Ph.D. advisor and approved by the Department Chair. The Director of Graduate Studies will then petition the Graduate School for final approval. University of Virginia M.S. or M.A. students continue to utilize their prior committee for course advice until a new Ph.D. committee is formed.

2. Advisors – Prior to arrival, each Ph.D. student will have identified an advisor from his/her field of interest. The student may change their advisor at any time by submitting a letter outlining the request to the Director of Graduate Studies and the Department Chair.

3. Course Requirements – For the Doctor of Philosophy degree, a student must complete a minimum of 72 graduate credit hours including at least 24 credit hours in graded graduate-level course work (i.e. not Non-Topical Research, EVSC 8998-8999 or 9998-9999). The 24 hours of course work may be comprised of a combination of regular graduate-level courses or EVSC 9995: Research Problems.

During each semester that a student is officially registered at the University of Virginia, he or she must be registered for a minimum of 12 hours of graduate credit; the 12 hours do not have to be in formal courses. Non-Topical Research (EVSC 8998-8999, 9998-9999) should be used to augment regular coursework to bring the total to 12 hours.

Students holding a Master’s degree from another institution must still complete a minimum of 18 credit hours of graduate course work at the University of Virginia (i.e. other than Non-Topical Research); a maximum of 6 credits of graded course work may be transferred from another institution upon approval by the Department Director of Graduate Studies, and the Graduate School. Students who obtain their M.S. or M.A. from the University of Virginia are typically allowed to count all graduate hours (including graded course work) toward the Ph.D.

Undergraduate majors in Environmental Sciences at the University of Virginia who desire to obtain the Ph.D. degree may count up to 6 “excess” graduate level credits taken while the student was enrolled as an undergraduate toward the Ph.D. degree. “Excess” is defined as graded courses taken as an undergraduate student over and above all requirements for the Bachelor’s degree. Under no circumstances will courses be credited toward both the Bachelor’s and Ph.D. degrees.

4. Area Requirements – All graduate students must pass a 3- or 4-credit graduate level non-seminar course from each of the four areas of the department, (Geosciences, Hydrology, Ecology and Atmospheric Sciences). Any courses listed in the area at the 5000-level or 7000-level shall meet this requirement (i.e. EVGE 5xxx or 7xxx, EVHY 5xxx or 7xxx, EVEC 5xxx or 7xxx, EVAT 5xxx or 7xxx). Courses offered as EVSC may be used to fulfill this requirement only with prior approval of the Graduate Academic Review Committee (GARC). In addition, each student must register for EVSC 7092, Department Seminar once during the Ph.D. candidacy; this course may be counted only once toward the Ph.D. degree. These requirements must be fulfilled prior to defense of the thesis.
(5) **Elective Courses** – Ph.D. candidates also must pass one additional 7000-level Environmental Sciences non-seminar course of 3-4 hours. The remaining credits of graded course work must be at the graduate level within Environmental Sciences, but are filled at the discretion of the student and advisor, and may include Research Problems.

Departures from Course Requirement rules must be approved in advance via petition to the GARC prior to the start of the semester during which the courses are to be taken.

(6) **Committee Formation** – The Ph.D. committee can be formed by the student at any time after entry. The committee consists of at least four faculty members: three from the department (including one member of the department outside the student’s area of specialization) and one Dean’s Representative (from another department). Committee members (but not the Advisor or the Dean’s Representative) may be chosen from other institutions. To change a committee member (or members), upon consultation with their major professor, the student must send a petition to the GARC outlining the reasons for the requested change. Ideally this petition would be sent no later than at the start of the semester in which the defense is expected to take place. This petition must be accompanied by the “Graduate Student Committee Changes” form.

The Dean’s Representative is an overseer responsible for making certain that the dissertation content and evaluation process meet the general standards of the University of Virginia and academia in general. (According to the GSAS Manual, their job is “to simply confirm that the student was treated fairly and that the rules of the GSAS were observed”). The Dean’s Representative must be a University of Virginia faculty member. At a minimum, the Dean’s Representative must be physically present at the dissertation defense; however, their participation is encouraged at any and all doctoral milestone events.

(7) **Comprehensive Examination** – Within five semesters of entering the Ph.D. program (or fewer if the student is awarded Advance Standing based on transfer credits from a prior Masters degree), all Ph.D. candidates must take a Comprehensive Examination. This examination consists of a written examination created by the student’s committee (possibly in collaboration with other faculty members whose expertise is needed) administered over a 2-day period followed by an oral examination. The written examination is based in part on the student’s coursework and in part on the general background that the committee thinks is necessary to address specifically the proposed area of the dissertation research. The aim of the examination is to require students to review all prior coursework, to test their ability to synthesize and interpret information in the critical intellectual fashion expected of Ph.D. candidates, and to judge the aptitude of the candidate for carrying out original scientific research. Copies of the examination questions along with the candidate’s answers will be placed in the student’s Department file. Oral examinations normally will be scheduled within two weeks of the written examination. Oral examinations are open to all faculty but they are not normally open to other students. The examinations will be held at a convenient time during the year for the committee and the student, and preferably should not be held during regular examination periods. An announcement must be distributed at least one week prior to the oral examination. The results of the written and oral examination will be announced immediately following the oral exam. The results will be pass, conditional pass, or fail. A conditional pass is accepted to mean pass, providing the student subsequently demonstrates elimination of inadequacies by means stipulated by the committee. In the event of a failure, the committee may elect to allow a single repetition of the examination.

(8) **Dissertation Proposal** – During, or as soon as possible after, formation of the committee, preliminary discussions are held between the student and the committee members concerning the
proposed research. This leads to a formal written proposal from the student including a literature review and experimental plan. After allowing the committee at least a week to read the proposal, an open meeting is held for the purpose of discussing the proposed research, making modifications, and, finally, approving the proposal. It is in the student’s best interest to solicit committee input before the research is done.

(9) Seminar – All candidates for the Ph.D. are required to deliver a Department-level seminar on the results of their thesis work sometime after their successful dissertation proposal defense and before the dissertation defense. The degree will not be conferred until this obligation is met.

(10) Dissertation Defense – The dissertation defense cannot be held until at least four months after the successful proposal defense. Clean, final copies of the dissertation should be circulated to committee members at least two weeks prior to the defense. Announcements of the dissertation defense should be circulated to all faculty and students one week before the defense. After the defense, suggested changes from the committee members and faculty should be made by the student under the major professor’s supervision. Finally, the student must provide committee members with a final, clean copy of the dissertation; the advisor receives a bound copy from the student. A copy of the Graduate School Final Examination Form must be signed and submitted to the Department Administrative Assistant.

Ideally, every reasonable effort should be made so that a graduate student’s entire committee is physically present for all student milestones (proposal defense, comprehensive exam, dissertation defense). However, faculty travel, sesquicentennial leaves, and other absences should not be a major deterrent to a student’s progress, especially given the increased availability of tele/video-conferencing facilities. Given the importance of the final defense, however, the faculty has developed the following policy:

1. the student’s major professor(s) must be physically present at all doctoral dissertation defenses;
2. if committee members are not available because of sesquicentennial/sabbatical leave, they may participate via video or tele-conferencing, if such facilities are available;
3. in the event of extraordinary extenuating circumstances, the student or major professor must contact the Department Chair for advice on how to proceed.

NOTE: Questions or problems concerning application of the regulations to specific student programs should be directed to the GARC Chair or your advisor.