

PhD Student Handbook
Academic Year 2009-2010
Version 2.0

(NOTE: If it is found that any of these rules are not in accord with the rules of the Graduate School of the University of Maryland, then the Graduate School Rules apply, <http://www.gradschool.umd.edu/catalog/>.)

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PhD Program Structure

1.1 Admission Policy

1.1.1 Requirements for Admission

The Department admits students to our doctoral program who have already completed a Masters degree and exceptionally well qualified students who have only completed a bachelor's degree. In all cases, admitted students are required to either possess or shall develop a strong foundation in the discipline of Geography. Admission to the doctoral program is also dependent on the support of two tenured/tenured-track faculty.

1.1.2 Academic Evaluation

Admitted doctoral students will be evaluated by the diagnostic subcommittee of the Graduate Committee following formal admission to the Geography PhD program to determine the strength of their Geography graduate-level background. The assessment of the diagnostic committee will determine the pathway that an entering PhD student will pursue prior to advancing to candidacy. Students can appeal their case to the committee if they do not agree with their review.

1.1.3 Optional Diagnostic Committee

The graduate student or his/her advisor has the option to form a Diagnostic Committee consisting of two tenured or tenured-track members of the Geography Faculty in addition to the advisor. This committee will meet with the student during the first semester to make recommendations for coursework based on the academic evaluation, if any, and the student's research interests, and to discuss potential research topics.

1.2 Required Course Work

Incoming PhD students are advised on elective classes by their Advisor in summer before arrival. Students in the program should consult with their Advisor and Advisory Committee on elective courses.

1.2.1 All Doctoral Students

All doctoral students are required to take the following four courses listed below. (15 credit hours.)

- a. GEOG 600 Introduction to Human Geography (3 credits, *grade of B or higher required*)
- b. GEOG 602 Introduction to Physical Geography (3 credits, *grade of B or higher required*)

Note: Exceptions will be made for students who have taken GEOG600 and 602, or their equivalent, within the past five years

- c. GEOG604 Doctoral Research Tutorial (3 credits, a minimum grade of B is required). Usually taken with the faculty advisor during the semester in which the student defends his/her dissertation proposal.
- d. GEOG 606 Quantitative Spatial Analysis OR GEOG 636 Qualitative Methods in Geography (3 credits, a minimum grade of B is required).

- e. GEOG798 Department Seminar (1 credit/semester, a minimum grade of B is required, 3 credits during PhD program).

Note: A PhD student may advance to candidacy without completing this requirement, but must complete the requirement before the dissertation defense. GEOG788C is the Graduate Orientation seminar for new students, and replaces one of the required GEOG798 Department Seminars.

- f. Elective Coursework: PhD students are required to take a minimum of 3 credits per semester of graduate-level courses during each semester prior to advancing to candidacy. These 3 credits shall not include independent studies (GEOG788), directed readings (GEOG789,) or pre-candidacy research (GEOG898). Exceptions may be made upon the agreement of the Faculty Advisor and the Graduate Director based upon previous experience in appropriate graduate-level courses
- g. Dissertation Research: PhD students are also required to take a minimum of 12 credits of dissertation research, GEOG 899, upon advancement to candidacy per Graduate School requirement (http://www.gradschool.umd.edu/catalog/doctoral_degree_policies.htm).
- h. Additional Coursework: In addition to the above requirements, most PhD students will be expected to take additional electives to strengthen their background in subjects related to their dissertation research. These courses may be independently selected by the PhD student or made a requirement for that PhD student as a result of discussions with their Faculty Advisor and/or Doctoral Student Advisory Committee.

1.2.2 Doctoral Students with Strong Geography Background

An example of the first two years of doctoral course work for a student with strong geography background is provided in Table 1. *Note: All doctoral students with funding to support their studies are required to take 10-credit hours of course work during each semester until they have advanced to candidacy.*

Table 1
Example 1st 4 Semesters Course of Studies
Doctoral Student with Strong Geography Background
 Assumes Advance to Candidacy at end of 4th Semester

<i>Semester 1</i>	<i>Semester 2</i>	<i>Semester 3</i>	<i>Semester 4</i>
<i>GEOG600 (3)</i>	<i>GEOG602 (3)</i>	<i>ELEC 6 or 7 (3)</i>	<i>GEOG604 (3)</i>
<i>GEOG798 (1)</i>	<i>GEOG798 (1)</i>	<i>GEOG798 (1)</i>	<i>GEOG6++ (3)</i>
<i>606 or 636</i>	<i>ELEC 6 or 7 (3)</i>	<i>ADD(3)</i>	<i>GEOG898(4)</i>
<i>ADD (3)</i>	<i>ADD(3)</i>	<i>ADD(3)</i>	

1.2.3 Doctoral Students without Strong Geography Background or Entering with a Bachelors-Only Degree

In addition to the requirements for all doctoral students, doctoral students without a strong masters-level background in geography, and all doctoral students entering with a bachelors-only degree, will be required to take:

- a. Distribution requirement of three 600-level or 700-level courses: one each from the three departmental Geography themes. Students should confirm with the Graduate Office that a specific class will satisfy this requirement. B minimum. *Note: These 3 courses meet the electives requirement noted above.*

- **Environmental and Biological Aspects of Earth Systems Science:** Climatology, geomorphology, biogeography, earth systems science
- **Human Dimensions of Global Change:** Cultural, population, economic, urban, regional, human dimensions of global change.
- **Geospatial Information Sciences:** GIS, remote sensing, spatial analysis, computer cartography, modeling.

Note: To complete the above may require completion of 400-level prerequisites.

- b. A minimum of nine additional credits at the 400-level or above that are related to the student's area of intended doctoral research. (These may include the 400-level prerequisites for the courses listed above.) Courses may be taken in departments other than Geography with permission of the student's Faculty Advisor and the Graduate Director. The student's Faculty Advisor or the Graduate Director must also approve electives. Within these nine credits, the student may take up to 6 credits of GEOG 898 (Pre-Candidacy Research).

Note: This requirement may be modified by the diagnostic subcommittee of the Graduate Committee upon initial evaluation of masters students entering the PhD program without strong geography background.

An example of the first two years of doctoral course work for a student without strong geography background and all doctoral students entering with a bachelors-only degree is provided in Table 2. *Note: All doctoral students with funding to support their studies are required to take 10-credit hours of course work during each semester until they have advanced to candidacy.*

Table 2
Example 1st 4 Semesters Course of Studies
Doctoral Student without Strong Geography Background
And Students Entering with a Bachelors-Only Degree
 Assumes Advance to Candidacy at end of 4th Semester

<i>Semester 1</i>	<i>Semester 2</i>	<i>Semester 3</i>	<i>Semester 4</i>
<i>GEOG600 (3)</i>	<i>GEOG602 (3)</i>	<i>ELEC 6 or 7 (3)</i>	<i>GEOG604 (3)</i>
<i>GEOG798 (1)</i>	<i>GEOG798 (1)</i>	<i>GEOG798 (1)</i>	<i>GEOG6++ (3)</i>
<i>PHYS (3)</i>	<i>HUM6 (3)</i>	<i>ADD (3)</i>	<i>GEOG898 (4)</i>
<i>606 or 636</i>	<i>MET6 (3)</i>	<i>ADD (3)</i>	

To continue in the PhD program students entering without a Masters degree in an appropriate field must:

- Pass the proposal defense. A second defense may be requested in cases where the student fails (see section 1.6). In the case of failure, the student may be eligible to receive a Masters degree if the coursework requirements are met and on completion of a Scholarly paper.
- Be sponsored by two faculty members.

1.2.4 Course Work following Advancement to Candidacy

According to Graduate School policy (http://www.gradschool.umd.edu/catalog/-doctoral_degree_policies.htm), a minimum of 12 credits of dissertation research (GEOG899) are to be taken after advancement to candidacy. Upon advancing to candidacy, the student will be automatically registered for 6 hours of GEOG899 each fall and spring term, and pay a flat tuition fee (this doctoral candidacy tuition is determined by the Graduate School and is presently the equivalent to the cost of 1.6 graduate credit hours). The candidacy tuition fee must be paid every semester regardless of whether a student is registered for other courses.

Note: A student cannot register for GEOG899 prior to advancing to candidacy. For research activities carried out prior to advancing to candidacy, a student may register for GEOG 898 (Pre-Candidacy Research).

1.2.5 Doctoral Student Teaching

All graduate students are strongly encouraged to gain teaching experience during doctoral studies. The Department of Geography offers a number of options for teaching experience. These opportunities range from leading discussion sections, teaching lab sections for specific courses, presenting guest lectures in courses, and serving as a course instructor. This last option is also available to qualified individuals during the winter and two summer terms. Students wishing to obtain teaching experience should discuss their desires with their advisor, supervisor (if they are Graduate Research Assistants), and the Associate Chair for Academic Affairs. The Associate Chair will review the student's background and qualifications and consult with the student's advisor and supervisor (if appropriate) in order to aid the student in developing a plan for teaching experience. The development of this plan should normally occur during the student's first two years of study.

1.3 Faculty Advisor

1.3.1 General Requirements

All doctoral students are required to have a faculty advisor. The faculty advisor is the student's first point of contact among the faculty. The student's faculty advisor will normally serve as the Chair of the Doctoral Student Advisory Committee and the Dissertation Examining Committee. If the student's advisor is a member of the Research Faculty of the department, the Chair of the Dissertation Examining Committee shall be the tenured/tenure-track co-advisor and the Research Faculty advisor shall serve as the co-chair.

1.3.2 Advisor Assignment

All students will be assigned an advisor at the beginning of their first semester of enrollment. This assignment will be based on the student's research interests and discussions between the student, candidate advisors, and the Graduate Director, and is normally one of the two faculty members who agreed to be sponsors. It is generally understood that if the student is a GRA, the PI funding the student will be the advisor. The student has the right to select his/her own advisor, and change advisors if necessary.

1.3.3 Advisor Credentials

Normally, the selected advisor will be a tenured/tenure-track member of the Geography Faculty. Research Faculty may also serve as a faculty advisor with the approval of the Graduate Director or Department Chair. Qualifications for eligible research faculty are as follows: (a) must hold the position of Assistant Research Scientist, Associate Research Scientist, or Senior Research Scientist; (b) should have prior experience supervising graduate students; and (c) must be a member of the Graduate Faculty at the University. If a member of the Research Faculty is

appointed as advisor, then a member of the tenured/tenure-track faculty must be appointed as co-advisor. The tenured/tenure-track co-advisor must agree to become the advisor in case the Research Scientist cannot continue advising the student.

1.3.4 Changing Advisors

On occasion, it may be necessary for a graduate student to change advisors. Under such circumstances, the student should contact the Graduate Director to discuss the need for a change. If the Director of Graduate Studies is the advisor, the graduate student should contact the Department Chair. After discussions between the student and the Director (or Chair), the Director (or Chair) will contact the affected parties and discuss the desired changes. The student and affected parties must then complete the ***Request for Change of PhD Department Advisor*** form. The student should consider changing advisors carefully, as it is not advisable to do so often.

1.4 Doctoral Student Advisory Committee

1.4.1 General Requirements

Usually during the first semester of studies, each student will select members to serve on a Doctoral Student Committee. The Doctoral Student Advisory Committee (DSAC) should include a minimum of four people, all of whom are members of the Graduate Faculty of the University of Maryland. At least three must be members of the Geography Faculty (tenured/tenure-track, research faculty, or lecturers), and two must be tenured/tenure-track members. One member must be from outside of the department. Although not required at this point, it might be helpful to select your Dean's Representative, who will be a required member of the student's dissertation defense committee (see Section 1.7.3).

The responsibilities of the Doctoral Student Advisory Committee include:

- a. Advising the student during the development of his/her dissertation proposal;
- b. Suggesting additional coursework and readings in order to ensure the student develops an adequate base of knowledge and competency in areas related to the student's research;
- c. Determining that the student has knowledge and competency in the areas related to the proposed dissertation research prior to advancing to candidacy;
- d. Reviewing the written dissertation proposal and conducting an oral examination of the proposal and the student's qualifications; and
- e. Continuing to advise the student during the conduct of his/her research up until the time of the Dissertation Defense (see Section 1.7 below).

1.4.2 Nomination of the Doctoral Student Advisory Committee.

As soon as a student and her/his advisor have identified the members of the Doctoral Student Advisory Committee and these members have agreed to serve on this committee, the student should file the ***PhD Doctoral Student Advisory Committee Nomination Form*** with the signatures of the student, advisor, and committee members. Once this form has been filed, the Director of Graduate Studies will provide each member of the committee with a copy of those "Requirements and Policies of the Department of Geography" that pertain to the Doctoral Student Committee and Dissertation Proposal Defense.

1.4.3 Nomination for Membership on the Graduate Faculty.

As noted in Section 1.7.3, all members of the student's Doctoral Student Advisory and Dissertation Examination Committees must be members of the Graduate Faculty. There are three

categories of membership: (a) Full Members: University of Maryland (College Park) tenured / tenure-track faculty; (b) Adjunct Members: non-tenure-track UMCP faculty who hold research, adjunct, or affiliated appointments; and (c) Special Members: individuals recognized as outstanding scholars who do not have any official affiliation at UMCP. If a person is not a Member of the Graduate Faculty, the student needs to file the ***Nomination for Membership on the Graduate Faculty*** form with the Director of Graduate Studies. Nomination for appointment to Adjunct or Special Member of the Graduate Faculty is made by the Head of the home unit, on the recommendation of the Full Members of the Graduate Faculty in the unit. Each nomination shall include a letter of support from the Head of the home unit, confirmation of approval of the Full Members of the Graduate Faculty in the unit, and current curriculum vitae. Appointment is by approval of the Dean of the Graduate School. The term of appointment is five years and is renewable upon renomination by the Head of the home unit after appropriate review within the unit. The appointment is terminated upon resignation or retirement.

1.4.4 Changes to the Doctoral Student Advisory Committee.

Should a student desire to change the membership of the Doctoral Student Advisory Committee, she/he should first talk with his/her advisor and then notify the Director of Graduate Studies of the proposed change. The Director will then circulate the ***Request for Changes to the PhD Doctoral Student Committee Form*** to the affected committee members.

1.4.5 Meetings with the Doctoral Student Advisory Committee

The student should meet with the Members of the Doctoral Student Advisory Committee (either as a group or individually) as often as is necessary to make satisfactory progress in the development of her/his dissertation proposal and dissertation research. The student and the Doctoral Student Advisory Committee should meet as a group at least once per year to review the student's progress, and is required to meet at least one time as a group at least one month prior to the Dissertation Proposal Defense. (See Appendix B, page 25.)

1.5 Annual Doctoral Student Progress Certification

1.5.1 General Requirements

Each April, the Chair of the Doctoral Student Advisory Committee will complete the ***Annual Progress Report for Doctoral Students*** certifying that the student has made satisfactory progress with respect to coursework, preparation of the dissertation proposal, and research. It will also note any teaching undertaken by the student. The student will be provided with a copy of this report. If the student has been judged to have not made satisfactory progress, the chair of the Doctoral Student Advisory Committee will explain as part of the report the reasons for this recommendation. Final Faculty Meeting of the year flags potential problems and the advisory committee is required to file a report. A report is not needed for students making sufficient progress. (See Appendix B, page 25.)

1.5.2 Departmental Termination from the Doctoral Program for Lack of Progress

During the last Faculty Meeting of each academic year, the Faculty will review the progress of each doctoral student. If a student has received two consecutive unsatisfactory reports from his/her Doctoral Student Advisory Committee, the Faculty can recommend to the Department Chair that the student be terminated from the Doctoral Program. If termination is recommended, the student will be informed in writing by the Director of Graduate Studies. The student has the right to appeal this decision within 30 days of receipt of written notification from the Director of Graduate Studies. The appeal must be made in writing to the Chair of the Department of Geography, who will then inform the student as to whether or not their appeal will be granted. If

the appeal is not granted, the Director of Graduate Studies will inform the Graduate School that the student has been terminated.

1.5.3 Causes for Termination from the Program.

In addition to causes for termination by the department, discussed above, a doctoral student may be terminated from the program by the University or the Graduate School for the following reasons:

1.5.3.1 University

A Teaching or Graduate Research Assistantship can be terminated for the following causes: incompetence, inefficiency, or neglect of duty; misconduct that is job-related; and delinquency in academic work; sexual harassment or other unethical or illegal behavior, loss or cancellation of funding source, or voluntary mutual agreement. If the Teaching or Graduate Research Assistantship of a student is terminated by the University, they will also be terminated from the program.

1.5.3.2 Graduate School

- a. Failure of the student to Advance to Candidacy within five years and complete all requirements for the Doctoral Degree within nine years are causes for termination from the program.
- b. Failure to register for courses for two consecutive Fall and Spring semesters are causes for termination from the program.

1.6 Advancement to Candidacy

1.6.1 General Requirements

All guidelines and policies that are used by the University for Dissertation Defenses with respect to Location, Open Dissertation Examination, and Public Notices are to be followed during the Dissertation Proposal Defense (http://www.gradschool.umd.edu/catalog/-doctoral_degree_policies.htm). The student must be advanced to candidacy five years from admission to the doctoral program and at least six months before the date on which the degree will be conferred. Under certain circumstances, a one-year extension may be granted by the University.

1.6.2 Specific Department Requirements

Advancement to candidacy in the Department of Geography requires the following:

- a. Completion of the required, elective and DSAC-defined additional course work.
- b. Demonstration of proficiency and competency in Geography by successful completion of GEOG600 and GEOG602 .
- c. Successful defense of the student's dissertation written proposal.
 - i. Dissertation proposal must be no longer than the equivalent of 30 double-spaced pages (12 point font), with appropriate figures and tables, not including the reference list. Style and format of Proposals must follow the Campus Electronic Thesis and Dissertation Style Guide. (see <http://www.gradschool.umd.edu/etd/styleguide/index.htm>)
 - ii. Copies of the written proposal shall be provided to each member of the Doctoral Student Advisory Committee not less than 10 working days prior to the announced

date for the Dissertation Proposal Defense. A printed copy of the Dissertation Proposal should also be provided to the Director of Graduate studies, who will make it available for review to any interested party.

1.6.3 Dissertation Proposal Defense.

The proposal defense is to show research can be accomplished and successful completion is appropriate for the PhD degree. The defense is normally completed not later than the fourth semester of study. Timelines will vary, of course, based on an individual student's circumstances, such as external employment and part-time status. A proposal defense typically lasts no more two hours. During the defense, the Doctoral Student Advisory Committee shall also determine that the candidate has the overall knowledge and qualifications required to carry out the research outlined in the proposal. The Defense is open to the public, attended by all members of the Doctoral Student Advisory Committee (but see Section 1.6.3.2 below).

1.6.3.1 Dissertation Proposal Defense Organization

- a. Selection of time and location of the defense is provided by chair of the Doctoral Student Advisory Committee. PhD proposal defenses should be held at a time agreed by members of the student's DSAC and at a time conducive to attendance by other members of the Department and Campus.
- b. The dissertation proposal defense will be announced by the student at least one week (5 working days) prior to the scheduled time.
- c. Conduct of the defense will consist of :
 - i. **Part 1, which will be a public presentation by the candidate** on the main aspects of the research reported in the dissertation. During Part 1, questions from the audience to the candidate will be permitted. For questions from persons who are not members of the DSAC, the Chair of the DSAC will have discretion to decide whether such questions are germane to the topic of the dissertation and how much time will be allotted for the answers.
 - ii. **Part 2, which will be a formal examination of the candidate** by the DSAC. This part will be open only to the DSAC, other members of the Graduate Faculty, and graduate students from the candidate's graduate program. During Part 2, only members of the Dissertation Examination Committee will be permitted to ask questions.
 - iii. **Attendance at the final discussion and vote** will be limited to the members of the Dissertation Examining Committee.
- d. The examining committee has no authority to change this document or department rules unless decided by the department.
- e. The DSAC will place equal emphasis on testing background knowledge pertaining to the research topic and the suitability of the research proposal.

1.6.3.2 DSAC Members participation

All members of the Doctoral Student Advisory Committee are expected to be present for the entire period of the Dissertation Proposal Defense. However, if a member is not able to attend or be present for the entire defense due to unforeseen circumstances, the Dissertation Proposal Defense may still be held if the Doctoral Student Advisory Committee has more than four members and if the remaining members constitute a legal committee as specified in Section

1.4.1. A defense may also still be held if one (and only one) member is physically absent, but is able to participate via audio or video conferencing. A minimum of three members of the Doctoral Student Committee must be physically present at the defense.

1.6.3.3 Areas Assessed in Qualifications and Proposal

- a. Presentation of a proposed research topic with the same degree detail as is normally given in the introductory sections of research papers
- b. Relating the specific research area in a. to the broader context of the current state of knowledge in the proposed field
- c. Clearly stating one or more research questions and put forth a practical work plan to answer these.
- d. Demonstration that the data and necessary research tools are available and are understood.
- e. Possessing the necessary background knowledge to complete the proposed research.

1.6.3.4 Learning Outcome Assessments

The Doctoral Student Advisory Committee utilizes the departmental learning outcome assessments in evaluating dissertation proposal defense. This University-mandated evaluation process consists of department-specified learning outcomes and a set of rubrics used in the evaluation process (see Appendix A, page 25).

1.6.3.5 Dissertation Proposal Defense Conclusion

After discussing the qualifications of the student and the dissertation proposal and its defense, the Doctoral Student Advisory Committee has the following options:

- a. To accept the qualifications of the student and the dissertation proposal without any recommendations for improvements or changes and sign the *Report of Doctoral Student Advisory Committee on the Defense of the Dissertation Proposal*.
- b. To accept the qualifications of the student with recommendations for improvements in his/her qualifications in specific areas and, except for the chair, sign the *Report of the Doctoral Student Advisory Committee on the Defense of the Dissertation Proposal*. The chair will certify that the student has taken the necessary steps to improve his/her knowledge in the specified areas, and, upon his or her approval, sign the *Report*.
- c. To recommend that the student make improvements in his/her qualifications in specific areas and not sign the *Report of the Doctoral Student Advisory Committee on the Defense of the Dissertation Proposal* until the student has demonstrated the recommended improvements.
- d. To accept the dissertation proposal with recommendations for changes and, except for the chair, sign the *Report of the Department Committee on the Defense of the Dissertation Proposal*. The chair will check that the changes to the dissertation proposal have been made, and, upon his or her approval, sign the *Report*.
- e. To recommend revisions to the dissertation proposal and not sign the *Report of the Doctoral Student Advisory Committee on the Defense of the Dissertation Proposal* until the student has made the changes and submitted the revised dissertation proposal for the Doctoral Student Advisory Committee's approval. The Doctoral Student Advisory Committee members sign the *Report* if they approve the revised dissertation proposal.

- f. To recommend improvements to the student's qualifications or revisions to the dissertation proposal and convene a second meeting of the Doctoral Student Advisory Committee to review the dissertation proposal and complete the student's Examination.
- g. To rule the student's qualifications or the dissertation proposal (including its Examination) unsatisfactory. In that circumstance, the student fails to Advance to Candidacy

1.6.3.6 Pass/Fail Criteria

The student passes the Dissertation Proposal Defense if all, or all but one, member of the Doctoral Student Advisory Committee agree to sign *Report of the Doctoral Student Advisory Committee on the Defense of the Dissertation Proposal*, before or after the approval of recommended improvements or changes. Two or more negative votes constitute a failure of the candidate to meet the Dissertation Proposal Defense requirement regardless of the size of the committee.

1.6.3.7 Notification of Examination Results

Following the Examination, the chair of the Doctoral Student Advisory Committee must inform the student of the outcome of the Examination.

The chair signs a *Report of the Doctoral Student Advisory Committee on the Dissertation Proposal Defense* indicating which of the above alternatives has been adopted.

- a. A copy of this statement is to be included in the student's file at the Department of Geography Graduate Office.
- b. A copy is given to the student and to the Graduate Director.

If a student fails the Dissertation Proposal Defense, within one week (5 working days) of the Examination the advisor/chair of the Doctoral Student Advisory Committee will submit an attachment to the *Report of the Doctoral Student Advisory Committee on the Dissertation Proposal Defense* that:

- a. Explains the areas of deficiencies identified by the members of the committee.
- b. If revisions to the proposal are requested and/or improvements in the qualifications of the students are required as a condition for passing the examination, the specific revisions and/or improvements will be summarized in writing and attached to the report.

In either of these cases, the Chair of the Doctoral Student Advisory Committee will also provide the student with a copy of the reasons or the recommended areas of revision and/or improvement.

1.6.3.8 Second Dissertation Proposal Defense

A second Dissertation Proposal Defense is available (upon approval of the Chair of the Doctoral Student Advisory Committee and the Graduate Director) provided that the student is in good standing at the time of the second examination. If the student fails this second examination, or if a second examination is not permitted, the student's admission to the graduate program is terminated.)

1.6.4 Requirements Prior to Formal Admission to Candidacy

After successfully defending their proposal, but before *Application for Admission to Candidacy* form is filed with the Graduate School:

- a. The student must submit a poster of his/her research summarizing the dissertation proposal to be installed in Room 1124. Contact the Graduate Office if you have questions concerning format or need access to the plotter. The advisor must review the poster.
- b. The student must provide bio information (including a list of publications) to the front office for posting on the departmental web site. Template for the bio will be provided. Submit to the Graduate Office for posting.
- c. The student must submit an abstract and graphic/photo of his/her research for the Research Brochure and PhD student research section on the web site. (See pp.61 ff., http://www.geog.umd.edu/research/rsch_brochure_0508.pdf, e.g.). Submit to the Graduate Office for posting.

1.7 Dissertation Defense

1.7.1 General Requirements

The defense of the dissertation follows the rules and procedures set out in the Graduate School Catalog (http://www.gradschool.umd.edu/catalog/doctoral_degree_policies.htm). The dissertation defense is public. The student has nine years from admission to the doctoral program to complete their Dissertation Defense, including submission of a completed, written copy of her/his dissertation to the University. Under certain circumstances, a one-year extension may be granted by the University. Departmental policy and significant highlights from Graduate School policy follow.

1.7.2 Dissertation Credits

A minimum of 12 credits of GEOG899 are needed, see Section 1.2.4. However, if a student desires to graduate in the Summer Term, he/she must register for at least one credit for that term, which can be GEOG899 if they have not accumulated the 12 credits necessary for graduation or another course if they have.

1.7.3 Readiness for defense

- a. Students should meet with their Committee at least one and no more than three months before the dissertation defense. The purpose of the meeting is to establish whether the research has reached a stage at which it is ready for a defense. All Committee members should attend except the Dean's representative whose presence is optional.
- b. Advisors will fill out a questionnaire to certify that they have reviewed a draft of the written dissertation which indicates that the final dissertation will be acceptable for defense.

1.7.4 Nomination of a Dissertation Examining Committee

This committee is normally the same as the Doctoral Student Advisory Committee and if a Dean's representative had not yet been appointed, they need to be included in this committee. Per the "Graduate School Requirements Applicable to all Doctoral Degrees," by the prescribed deadline and at least six weeks prior to the date of the oral Dissertation Defense, the student needs to formally nominate his/her Dissertation Examining Committee. This involves submitting a completed and signed form to the Graduate School that contains the names of the committee members, the title of the dissertation, and the date of the defense.

This committee, appointed in accordance with Graduate School policy, consists of a minimum five members, all members of the Graduate Faculty of the University of Maryland: tenured/tenure-track members, adjunct member, or special member. At least three must be members of

the Geography Faculty, with two being tenured/tenure-track members. One member must be a representative of the Dean of the Graduate School. The Dean's Representative must be a Tenured Member of the Graduate Faculty at the University of Maryland and must be from a graduate program other than the student's home program. If the members of this committee change, the committee must be re-approved by the Graduate School.

1.7.5 Presence of Dissertation Examining Committee at Dissertation Defense

Oral examinations must be attended by all members of the student's officially established Dissertation Examining Committee as approved by the Dean of the Graduate School. All examinations must be open to all members of the University of Maryland Graduate Faculty . Under department policy, the defense is also open to the public. The Graduate School provides procedures for last-minute substitution of a member if that member cannot attend due to an emergency and allows remote videoconferencing with a member under certain circumstances (http://www.gradschool.umd.edu/catalog/doctoral_degree_policies.htm).

1.7.6 Style and format of Dissertations

Style and format of dissertations must follow the Campus Electronic Thesis and Dissertation Style Guide. (see <http://www.gradschool.umd.edu/etd/styleguide/index.htm>)

1.7.7 Dissertation Copies

In addition to providing each member of the Dissertation Examining Committee with a copy of the dissertation, the student should also provide a copy to the Director of Graduate Studies, who will make it available to any interested party. The Department requires one bound copy of the dissertation

1.7.8 Oral Defense

The procedures for conducting the oral defense are the same as those for the defense of the dissertation proposal, see Section 1.6.3.

1.7.9 Conclusion of the Defense

At the conclusion of the defense, the Committee has the following options:

- a. To accept the dissertation without any recommended changes and sign the *Report of Examining Committee*
- b. To accept the dissertation with recommendations for changes and, except for the chair, sign the Report of the Examining Committee. The Chair will check that the changes to the dissertation have been made, and, upon his or her approval, sign the *Report of Examining Committee*.
- c. To recommend revisions to the dissertation and not sign the Report of Examining Committee until the student has made the changes and submitted the revised dissertation for the Dissertation Examining Committee's approval. The Dissertation Examining Committee members sign the *Report of Examining Committee* if they approve the revised dissertation.
- d. To recommend revisions and convene a second meeting of the Dissertation Examining Committee to review the dissertation and complete the student's examination.
- e. To rule the dissertation (including its examination) unsatisfactory. In that circumstance, the student fails. Following the examination, the Chair, in the presence of the Dean's Representative, must inform the student of the outcome of the examination. The Chair

and the Dean's Representative both sign a Report of the Examining Committee indicating which of the above alternatives has been adopted. A copy of this statement is to be included in the student's file at the graduate program office, and a copy is given to the student.

1.7.10 Learning Outcome Assessment

The Doctoral Student Advisory Committee utilizes the departmental learning outcome assessments in evaluating the dissertation defense. This University-mandated evaluation process consists of department-specified learning outcomes and a set of rubrics used in the evaluation process (see Appendix A, page 18).

1.7.11 Pass/Fail Criteria

The student passes if one member refuses to sign the *Report of the Examining Committee*, but the other members of the Dissertation Examining Committee agree to sign, before or after the approval of recommended changes. Two or more negative votes constitute a failure of the candidate to meet the dissertation requirement. In cases of failure, the Dissertation Examining Committee must specify in detail and in writing the nature of the deficiencies in the dissertation and/or the oral performance that led to failure. This statement is to be submitted to the program's Graduate Director, the Dean of the Graduate School, and the student. A second examination may be permitted if the student will be in good standing at the time of the proposed second examination. A second examination requires the approval of the program's Graduate Director and the Dean of the Graduate School. If the student fails this second examination, or if a second examination is not permitted, the student's admission to the graduate program is terminated.

Appendix A—Learning Outcome Assessments

PhD Program – Department of Geography

December 2005

Process

The responsibility for development of the assessment plan was assigned to Department's Graduate Committee. It was determined that this group was the best suited for this activity because in addition to having overall responsibility for developing policies regarding the graduate program, it consists of members who represent the major research and discipline areas within the department. The initial draft of the assessment plan was developed by a working group of three members of the Graduate Committee, and then presented to the full Department Faculty at its Fall 2005 retreat. Revisions to the initial assessment plan were then made based on a consensus of the entire Faculty, and the final plan was submitted to the full Department Faculty for a vote at its December 2005 Faculty Meeting.

Goals

The overall goal of the Ph.D. program in the Department of Geography is to educate scholars-practitioners who contribute to the study and understanding of significant societal concerns and problems related to global, regional and local environmental issues, including land use change, sustainable development, cultural ecology, societal vulnerability, and climate change. Our objectives include providing students with opportunities to build upon their previous academic training to ensure that they have knowledge and competency not only in the field of geography, but in the disciplines related to the student's dissertation research. Our objectives also include providing the students with opportunities to carry out unique research in the field of geography, which, in turn, includes providing the mentorship and training in geographic research, as well as access to the computer resources that are becoming central to the application of quantitative geographic methods.

Methods

To ensure that our students have knowledge and competency in the field of geography, we offer a two-course sequence that presents an overview of the three primary sub-fields within the discipline: human geography, physical geography, and geographic methods. Each student is required to pass a two-part comprehensive exam based on core knowledge in geography. Each student is required to register for 3 terms of the Department Seminar as well, which provides the students with exposure to the breadth of research and applications in the field of geography.

To provide the students with opportunities to increase their depth of understanding in areas related to their doctoral research, the students have a variety of options. The Department offers 3 to 4 graduate level courses in each of the three sub-fields, as well as graduate level seminars on topics selected by individual faculty in each sub-discipline area every year. Students can enroll in upper-level undergraduate courses in order to develop proficiency in specific areas prior to taking graduate level courses. Our students can take courses offered in other departments to further develop knowledge related to their research interests. Finally, students can enroll in an independent readings course for an in-depth review of the scientific literature related to a specific topic area.

Each student selects an advisor who serves as her/his primary mentor throughout their tenure in the doctoral program. Within the first year, the student forms a Doctoral Student Advisory Committee (chaired by the advisor), which meets as often as necessary (at least once per year) to provide guidance with respect to coursework and the student's dissertation research.

Each student prepares a written proposal on a research topic of her/his choosing, which is submitted to the Doctoral Student Advisory Committee for review. At this time, the Chair of the Doctoral Student Advisory Committee conducts an oral defense, where the merits of the dissertation are judged by criteria that include the knowledge, background and expertise of the student in areas related to the topics covered in the dissertation proposal, and the objectives/hypotheses, methods, expected results, and relevance of the dissertation proposal. After the successful defense of the dissertation proposal and passing the Comprehensive Exams, the doctoral student advances to Candidacy.

Once advanced to candidacy, the student continues to meet with the Doctoral Student Advisory Committee as a group or with individual members to review the progress of the dissertation research. The full Department Advisory Committee meets once per year to evaluate the progress the student. At a Faculty Committee in May of each year, the progress of each doctoral student is discussed. If a student fails to make satisfactory progress for two consecutive years, he/she is subject to dismissal from the doctoral program.

When the dissertation research is completed, the student nominates a Dissertation Examination Committee (chaired by the Advisor) that must be approved by the Graduate School prior to the Dissertation Defense. The student submits a written dissertation summarizing their research to the Dissertation Examination Committee, and the Chair schedules an oral examination of the dissertation research. Upon successfully defending their dissertation research and submitting an approved version (that addresses all issues raised by the Dissertation Examination Committee) of the written dissertation to the Graduate School (in the specified format), the student is awarded the PhD.

Rubrics are used to evaluate the dissertation proposal and oral defense, and the dissertation document and dissertation oral defense.

Evaluation and Feedback

As noted above, the progress of each doctoral student is monitored and reported each year. If a student is failing to make adequate progress, they are informed in writing by their advisor as to the steps they need to take to improve their progress.

The Department's Graduate Committee has the lead responsibility for all issues that deal with our Graduate Program. It is responsible for developing and revising all policies related to the graduate education, and addressing concerns and issues that arise, including those brought forth from other committees (e.g., the Teaching and Graduate Student Committees). The Graduate Committee presents recommendations for changes to the Faculty Committee, where they are discussed. Any changes to existing policies require approval of the Faculty Committee. Policy changes are then implemented by Department Administration (e.g., the Department Chair and the Director of Graduate Studies).

As part of our evaluation and feedback process, at the end of the spring term of each year the Director of Graduate Studies will review the progress of our doctoral students using the outcomes, measures, and criteria summarized in the Assessment Plan for the Department of Geography's Doctoral Program. The results of this review will be reported to the Graduate Committee, who will then decide upon courses of action needed to address areas where outcome expectations are not being met. As noted above, the Graduate Committee will then report the outcome assessments and recommended actions to the Faculty Committee, where the course of action will be voted upon by the entire Faculty, and the actions will implemented by Department Administration.



Assessment Plan

DEPARTMENT OF GEOGRAPHY – Doctorate of Philosophy

Program Contact: **Ralph Dubayah**

Phone: **5-4069**

E-mail: **dubayah@geog.umd.edu**

Date submitted to Academic Unit Head: **28 September 2006**

Program Goals: **Educate Ph.D. level scholars-practitioners who contribute to the study and understanding of significant societal concerns related to global, regional and local environmental issues, including land use change, sustainable development, cultural ecology, societal vulnerability, and climate change.**

Relevance of goals to the mission statements and/or strategic plans of the University, College, or Program as applicable: **The following program goals are aligned with both the College of Behavioral and Social Sciences' and the University's mission statements and strategic plans:**

- 1. Maintain a strong culture of excellence in education, research, and scholarship within the Department of Geography.**
- 2. Maintain the high quality of education and the student experience in the Department of Geography.**

Student Learning Outcomes	Assessment Measures and Criteria	Assessment Schedule
<p>1. Demonstrate advanced knowledge and competency of core content areas of Geography and an understanding of significant societal concerns. These content areas include physical geography and environmental systems, human geography and geographic methods</p>	<p>Measure: Comprehensive Exam Results Criteria: A significant majority (90%) of students will pass all sections of their Comprehensive Exams within two years of entering the doctoral program (based on a running average).</p>	<p>2005 and then on a yearly basis</p>
<p>2. Students will demonstrate the ability to develop an original research proposal for a study that contributes to an understanding of a significant problem in their discipline area, and to further demonstrate knowledge and competency sufficient for carrying out the proposed research</p>	<p>Measure: PhD. oral and written proposal defense rubric. Criteria: Dissertation rubric evaluations for various aspects of dissertation proposal and oral examination (with criteria of “satisfactory” and “unsatisfactory”) scored and documented. 80% of scores will be at the “satisfactory” level.</p>	<p>2005 and then on a yearly basis</p>

<p>3. Demonstrate the ability to communicate scientific results effectively, both orally and in writing.</p>	<p>Measure: PhD. final examination rubric which evaluates aspects of both written and oral communication.</p> <p>Criteria: Dissertation rubric evaluations for various aspects of dissertation document and oral defense (with criteria of “satisfactory” and “unsatisfactory”) scored and documented. 80% of scores will be at the “satisficatory” level.</p>	<p>2005 and then on a yearly basis.</p>
<p>4. Demonstrate the ability to carry out original research through mastery of key content, literature, qualitative and quantitative data analysis, and geographic methods appropriate in a specific sub-area of geography (such as land use, climate, biogeography, cultural ecology).</p>	<p>Measure: Defense of Written Dissertation</p> <p>Criteria: The majority (> 2/3) of doctoral students will defend a written dissertation before a Dissertation Examination Committee within 5 years of advancing to candidacy (based on a running average).</p>	<p>2005 and then on a yearly basis</p>

DEPARTMENT OF GEOGRAPHY: Graduate program assessment for masters theses and PhD proposal defense (revised 1/1/10).

Each member of the faculty committee should complete one of these forms for the student in question following conclusion of the faculty discussion, but before the student has returned to the room. Do not identify yourself or the student by name on this form. These forms should be placed in an envelope held by the Chair of this committee. Do NOT use this form for M.A. scholarly papers.

This is a: ____ M.A. Thesis ____ Ph.D. Proposal Examination

Circle one: Spring 2009 Summer 2009 Fall 2009

	Check one for each listed criterion	
	Satisfactory	Unsatisfactory
Criteria for written components:		
1. Statement of problem is clear and well-conceptualized.		
2. Relevance of problem within the context of previous geographic research is presented.		
3. Research methods are well-selected.		
4. Use of figures, images, maps and other graphics highlight important findings and/or deepened understanding of the problem.		
5. There is appropriate use of primary and secondary sources.		
6. The document is well-written.		
Criteria for oral components:		
7. The student observed time limitations, spoke with clarity and sense of organization, and overall gave a compelling oral performance		
8. The student answered the questions faculty asked (i.e. understood the question being asked and answered that specific question).		
9. The student demonstrated breadth of knowledge in geography and in any appropriate allied fields (e.g. biology, meteorology, political science).		
10. The student demonstrated an appropriate depth of knowledge in geography and allied fields relevant to their specific research areas.		
11. The student demonstrated an appropriate knowledge of the literature relevant to their specific research areas.		

DEPARTMENT OF GEOGRAPHY: Graduate program assessment for PhD dissertation defense

Each member of the faculty committee should complete one of these forms for the student in question following conclusion of the faculty discussion, but before the student has returned to the room. Do not identify yourself or the student by name on this form. These forms should be placed in an envelope held by the Chair of this committee (revised 1/1/10)

Circle one: Spring 2009 Summer 2009 Fall 2009

	Check one for each listed criterion	
	Satisfactory	Unsatisfactory
Criteria for written components:		
1. Statement of problem is clear and well-conceptualized.		
2. Relevance of problem within the context of previous geographic research is presented.		
3. Research methods are well-selected and well-executed.		
4. The research is appropriate and thorough.		
5. Conclusions are well-justified.		
6.. Use of figures, images, maps and other graphics highlight important findings and/or deepened understanding of the problem.		
7. There is appropriate use of primary and secondary sources.		
8. The document is well-written.		
9. The material in the document is suitable for publication.		
Criteria for oral components:		
10.. The student observed time limitations, spoke with clarity and sense of organization, and overall gave a compelling oral performance		
11. The student answered the questions faculty asked (i.e. understood the question being asked and answered that specific question).		
12. The student demonstrated breadth of knowledge in geography and in any appropriate allied fields (e.g. biology, meteorology, political science).		
13. The student demonstrated an appropriate depth of knowledge in geography and allied fields relevant to their specific research areas.		
14. The student demonstrated an appropriate knowledge of the literature relevant to their specific research areas.		

