

# Geography

## **2014-2015 Graduate Student Handbook**



# GEOGRAPHY 2013-2014 GRADUATE STUDENT HANDBOOK

|  |           |
|--|-----------|
| <b>PROGRAM REQUIREMENTS FOR ALL DEGREES.....</b>                       | <b>4</b>  |
| Registration.....  | 4         |
| Advisor.....   | 4         |
| Entry Interview .....  | 5         |
| Full-Time Academic Status and Course Credits.....                      | 5         |
| Core Courses.....  | 6         |
| Communication Requirement .....  | 7         |
| Graduate Assistantships.....   | 8         |
| Annual Evaluation for Continued Funding.....                           | 10        |
| Stopping the Clock on Funding .....                                    | 11        |
| Medical Insurance.....   | 12        |
| Other Important Points.....  | 13        |
| Academic Integrity.....  | 13        |
| <br>   |           |
| <b>MASTER’S PROGRAM.....</b>   | <b>17</b> |
| Master’s Program Committee.....  | 19        |
| Credits and Coursework.....  | 20        |
| Master’s Proposal.....   | 21        |
| Completing a Master’s Thesis .....                                     | 22        |
| Completing Master’s Research Papers .....                              | 23        |
| Presentation of Master’s Research.....                                 | 23        |
| Registration Requirements.....   | 23        |
| Graduate School Time Limit .....                                       | 24        |
| Example Two-year Program.....  | 25        |
| <br>   |           |
| <b>DOCTORAL PROGRAM .....</b>  | <b>29</b> |
| Graduate School Requirements.....                                      | 31        |
| Language and Communication Skills Requirements.....                    | 31        |
| <b>Five-Year PhD with MS Degree .....</b>                              | <b>32</b> |
| Courses and Registration .....   | 32        |
| Master’s Program Committee.....  | 33        |
| Master’s Proposal.....   | 34        |
| Completing Master’s Research.....                                      | 36        |
| Presentation of Master’s Research.....                                 | 37        |
| Doctoral Candidacy Committee and Examination .....                     | 43        |
| Doctoral Committee.....  | 45        |
| Order of the Dissertation Proposal and Comprehensive Examination ..... | 46        |
| Dissertation Proposal .....  | 47        |
| Comprehensive Examination .....  | 47        |
| Residency Requirements.....  | 49        |
| Graduate School Time Limit .....                                       | 49        |

|  |           |
|--|-----------|
| Doctoral Dissertation .....  | 49        |
| Doctoral Defense—The Final Oral Examination .....  | 50        |
| Example Four-year Program.....   | 52        |
| <b>Four-Year PhD (for students <u>with</u> master’s degrees from other programs) .....</b> | <b>55</b> |
| Courses and Registration .....   | 55        |
| Doctoral Candidacy Committee and Examination .....   | 56        |
| Doctoral Committee.....  | 58        |
| Order of the Dissertation Proposal and Comprehensive Examination .....                     | 59        |
| Dissertation Proposal .....  | 60        |
| Comprehensive Examination.....   | 60        |
| Residency Requirements.....  | 62        |
| Graduate School Time Limit .....   | 62        |
| Doctoral Dissertation .....  | 62        |
| Doctoral Defense—The Final Oral Examination .....  | 63        |
| Example Four-year Program.....   | 65        |
| <br>   |           |
| <b>GEOGRAPHY GRADUATE MINOR .....</b>  | <b>79</b> |
| <br>   |           |
| <b>TIMELINES FOR PENN STATE GEOGRAPHY GRADUATE PROGRAMS.....</b>                           | <b>80</b> |

# PROGRAM REQUIREMENTS FOR ALL DEGREES

## **Registration**

Graduate students who are in residence at the University must be registered during fall and spring semesters. The responsibility for being properly registered rests with the student. Students may register for coursework or research or a combination of the two. Students must register for audited courses as well as those taken for credit. Students must be registered for any semester (including summer) in which they take an exam.

Candidates for the PhD degree must register continuously for each fall and spring semester from the time they pass the comprehensive examination and meet the two-semester residence requirement until their doctoral committee accepts the dissertation. One credit per semester is sufficient to meet this requirement, although students working as Teaching or Research Assistants must carry between 9 and 12 credits.

Because the Department of Homeland Security requires international students on an F1 or J1 visa to be in residence, all international students must be registered for full-time status (fall and spring semester), unless an exception to full-time enrollment has been approved. Students who fail to register may jeopardize their visa status.

Students must complete registration during the officially designated period and must attend the first meeting of all classes. A student who fails to complete the process of registration within the officially designated registration period will be liable for the late registration charge, regardless of when the student begins attending classes. Some people simply forget to register! Registering late will cost you time and a \$250 late registration fee.

## **Advisor**

Graduate students do not have an advisor upon entry to the Department. Incoming students are encouraged to be proactive during the first half of the fall semester, visiting many faculty members to explore potential research topics and identify potential advisors.

*Incoming students must select a permanent advisor by the Friday before Thanksgiving and submit the gold form to the Graduate Program Assistant. Delinquent students will be asked to meet with the Graduate Program Officer immediately after Thanksgiving break to explain why they have not selected their advisor.*

Students may request a change of advisor at any time (purple form).

## Entry Interview

Each incoming graduate student is assigned to an entry committee by the Graduate Program Officer. Students will meet with their entry committee the Friday before classes start. The entry interview is a meeting of the student with their entry committee, consisting of three or four faculty members who, as a group, represent the breadth of the discipline of geography. The purpose of the meeting is to discuss student goals, to evaluate the student's breadth of knowledge of geography, to help plan a course of study, and to anticipate timing for important exams. Study plans arising from the meeting may include enrolling in or auditing formal courses, arranging directed readings or individual study with particular faculty (GEOG 596), and registering for thesis research credits (GEOG 600).

*Each student must complete a Summary form before the entry interview and bring five copies to the meeting (one for the student and one for each of the four faculty serving on the entry committee) to aid in discussion of his/her background and plans. After the meeting, the committee will complete the Report form (the second page of the entry interview form) that describes recommendations for the student's course of study for their first year in the program. Copies of the committee's Entry Interview Report and the student's Summary will be placed in the student's file. The Graduate Staff Assistant will give a copy of the report to the student.*

## Full-Time Academic Status and Course Credits

Full-time academic status is considered to be 9 credits (which may be a combination of courses, independent study, and thesis credits). The *Graduate Degree Programs Bulletin* ([http://bulletins.psu.edu/bulletins/whitebook/academic\\_procedures.cfm](http://bulletins.psu.edu/bulletins/whitebook/academic_procedures.cfm)) states that for graduate assistants on half-time appointments (20 hours per week) the minimum credit load is 9 credits and the maximum credit load is 12 credits. All other students (e.g., self-supported, fellowship) should take at least 9 credits and no more than 15 credits to retain fulltime status and to have a semester count towards residency for the PhD.

All courses at and above the 400-level qualify for graduate credit. In some cases, students may wish to take a lower-level course as an independent study (e.g., GEOG 496) and do extra work for graduate credit. GEOG 596 is used when registering for graduate independent studies. Concurrent independent studies with different faculty members are permitted for up to 9 credits each semester. MS students and pre-comprehensive exam PhD students may enroll in GEOG 600\* credits while researching and writing their MS thesis/papers or PhD dissertation.

The updated *Graduate Degree Programs Bulletin* is available at:  
<http://www.psu.edu/bulletins/whitebook/>

---

\* GEOG 600 applies to students in residence. MS students and pre-comprehensive exam PhD students working on research while off campus must register for GEOG 610. Once PhD students have passed their comprehensive exams, they must register for GEOG 601 on campus or GEOG 611 off campus.

## Core Courses

Geography 500 and 502 are a required six-credit sequence taken over two semesters in the first year of study. Along with Geography 590, they constitute the core curriculum for graduate work in geography.

- All master's and five-year PhD students must take the full sequence of courses in their first year
- Students entering the PhD program with a master's in geography from another program will normally take the full sequence unless the entry interview committee recommends otherwise; such recommendations are rare

### ***FALL—GEOG 500: Introduction to Geographic Research*** (3 credits)

The purpose of Geography 500 is to help the student take a major step in their development as a professional geographer, moving from a role of a consumer of geographical knowledge to a position in which they are poised to contribute to that knowledge. GEOG 500 is about surveying the field selectively, sub-discipline by sub-discipline; it is also about contemporary and historical debates that have shaped the field. At a broader level, it is about major debates in the philosophy of science and how we conduct research today in a multi-faceted world in which no single point of view dominates. Students are responsible for organizing and synthesizing material and presenting it in class, overseeing class discussions, and contributing to classroom dialogue. It is a chance to join together to see what the field holds in common and how we, as individuals, situate ourselves within geography. Along the way, students become acquainted with Penn State's research resources and, through supportive interactions, help each other prepare for their programs of study. Students will receive a letter grade for this course.

### ***SPRING—GEOG 502: Research Scholarship in Geography*** (3 credits)

Graduate students are expected to make a significant research contribution as part of the requirements for a MS or PhD degree in Geography. The course *Research Scholarship in Geography* provides students with the basic understanding of the craft of scholarly geographic research. It does so by setting research into a tradition of commonalities that shape expectations (e.g., disciplinary and federal IRB ethics standards; ideas of academic freedom and responsibility) and by focusing on the mechanics of key steps in the research process (identifying problems, developing questions and proposals, designing programs of research, executing a systemic program of research, responding to criticism and to opportunities, preparing and delivering oral presentations, and writing and publishing research reports). The course emphasizes important skills in developing research proposals, seeking research funding, writing manuscripts, giving presentations, and publishing research results.

Oral presentations of students' proposed research occur in the second half of the semester. Students should invite their advisors as well as prospective committee members to attend their presentations. Students will receive a letter grade for this course.

***FALL AND SPRING—GEOG 590: Colloquium*** (1 credit each semester of first year)

For the Colloquium, new graduate students host the Geography community and public at weekly Coffee Hour presentations by invited speakers from other universities, industry, and government, other Penn State departments, and the Department's own faculty and senior PhD students. New grads advertise each speaker and organize refreshments to welcome attendees before each presentation. They also bring a critical ear to the varied topics presented, with weekly assignments submitted to the faculty organizers of Coffee Hour. Students will receive an 'R' grade in this course. Attendance and participation is mandatory for all first-year students; it is possible to fail this course.

**Communication Requirement**

Developing communication skills is central to the graduate program in Geography. Whether one pursues a career in government service, private research, or teaching, the ability to synthesize information, complete written and oral presentations, and communicate research results effectively are vital to successful professional activities.

Competency in communication skills is required of all MS and PhD students, regardless of whether they hold fellowships, assistantships, or rely on their own funding. To build skills essential in future professional activities, the Department expects all students to participate in teaching and research activities associated with particular courses or projects during two or more semesters.

Competency in communication will be developed and refined by:

- (a) Classroom, seminar, and formally funded research activities
- (b) Preparation of reports summarizing research activities
- (c) Oral communication through teaching (as a teaching assistant, instructor, and/or volunteer activities such as guest lecturer in courses), seminar presentations, and presentations at professional meetings
- (d) Thesis and dissertation research and writing

Each student is responsible for participating in sufficient activities to meet the communication requirement. Completion of the requirement will be judged by the academic advisor and graduate committee. The advisor's certification of a student's progress toward accomplishing an appropriate level of ability is made at the proposal defense meeting for MS students. For PhD students, this progress is certified before the comprehensive examination can be taken, and is checked either (1) at the proposal defense or (2) at a special meeting before the comprehensive exam.

## **Graduate Assistantships**

Graduate Assistantships consist of either Graduate Teaching Assistantships (TAs) or Graduate Research Assistantships (RAs). During the fall and spring semesters, Graduate Assistantships are 18 weeks in length each semester and duties begin one week before classes begin and conclude one week after the last day of class. TAs and RAs should make travel plans that accommodate these responsibilities occurring before and after classes meet. TA course responsibilities and grading must be complete before departure at the end of the semester.

The Graduate Program Officer will ask students in residence about their TA and RA preferences before the start of each semester, but assignments are made based on a balance of Department needs, student skills and preferences, and schedules. RAs are selected according to the availability of research funds and specific research needs of the faculty procuring the funding.

### ***Graduate Teaching Assistantships***

In general, half-time TAs are expected to work 20 hours per week on average and are required to meet classes on time, to be well prepared, to guide and grade students respectfully and accurately, and to support the course instructor's goals. Specific tasks may include, but are not limited to:

- Teaching recitation, discussion, or lab sections, including preparation, delivery, and grading
- Attending and assisting at all course lectures (e.g., setting up/taking down equipment, taking roll, distributing handouts)
- Meeting with instructor once per week outside of class
- Photocopying course materials
- Grading exams, papers, labs, and other student assignments
- Proctoring all exams
- Delivering occasional lectures (requiring mutual agreement between TA and Instructor)
- Helping develop recitation, discussion, or lab exercises, materials, etc. on request

If the workweek consistently averages more than 20 hours per week, TAs should work with the instructor to reduce hours to an average of 20. If the instructor demands more than 20 hours per week on average, TAs should see the Graduate Program Officer to resolve this conflict.

The Department requires all incoming students who are TAs or who are likely to become TAs to attend during orientation week the following workshop taught by the Schreyer Institute for Teaching Excellence:

TA 101: A Guide to the Teaching Assistantship. This workshop for new teaching assistants highlights teaching assistant responsibilities, effective classroom



management, learning-centered office hours, effective grading, and maintaining professional boundaries with students and faculty supervisors.

If there is a conflict that prevents an incoming TA from attending this workshop, then that student must work with the Graduate Program Officer to find a substitute activity as soon as possible.

International students from countries where English is not the language of instruction and who will serve as TAs need to take the Penn State American English Oral Communicative Proficiency Test. For students to serve as a TA, they must receive a score of 250-300. If this score is not met, the students are required to fulfill language requirements by taking specific English courses. Please refer to <http://aplng.la.psu.edu/academicPrograms/itaProgram.php> for the specific details of the requirements.

In addition, the Department strongly encourages international students to take the following workshop from the Schreyer Institute:

International Teaching Assistant Training. Co-sponsored by International Student Services, this workshop will include topics such as U.S student culture, alignment of student/instructor expectations, effective communication and public speaking and classroom management.

### ***Graduate Research Assistantships***

In general, half-time RAs are expected to work 20 hours per week and complete tasks effectively and efficiently, bringing analytical insight to the research. Specific tasks may include, but are not limited to:

- Meeting with supervisor once per week or more
- Meeting with sponsors on demand
- Collecting data and building databases
- Graphing, mapping, and manipulating data
- Analyzing data
- Developing and experimenting with software
- Preparing written reports
- Preparing and presenting oral reports
- Attending conferences, workshops, symposia, etc.

If the workweek consistently averages more than 20 hours per week, RAs should work with the research supervisor to reduce hours to an average of 20. If the supervisor demands more than 20 hours per week on average, RAs should see the Graduate Program Officer to resolve this conflict.

### ***Semester-end evaluation of Teaching Assistant and Research Assistant performance by supervisor***

Supervisors of Teaching Assistants and Research Assistants will meet with each TA or RA at the end of the fall and spring semesters to discuss their performance and complete a form summarizing the discussion. Forms will be sent to RAs and TAs and to their assistantship supervisors before the end of each semester, including summers. Students who have RA duties over the summer will meet with their supervisors during orientation week (i.e., the week before fall semester begins) to discuss summer performance.

Both faculty and students will fill out the form and, at the formal meeting, discuss their forms and develop a summary form that reconciles the two independent forms. Students will read the reconciled form and sign it to acknowledge that they read it; if they disagree with elements of the form, students can request a joint meeting with the supervisor and Graduate Program Officer to discuss this disagreement. Copies of the signed form will go to the student, the student's advisor, and the student's file no later than the first week of the spring semester for fall assistantships, no later than two weeks after graduation in the spring semester for spring assistantships, and no later than the first week of fall semester for summer RAships. The forms from these evaluations will *not* be part of the annual evaluation for continued funding.

### **Annual Evaluation for Continued Funding**

Each student prepares an Annual Report early in the spring semester. This report will become part of the student's permanent record and will be used in the annual evaluation of the student's academic status and eligibility for scholarships, fellowships, assistantships, and awards. The due date for the completed annual report is **January 31**.

Continued funding depends on, but is not necessarily limited to:

- Making satisfactory progress on—and meeting specified deadlines for—program milestones, such as proposals and exams
- Executing and completing TA/RA responsibilities effectively
- Achieving and maintaining good grades in courses, with at least a Graduate School-mandated minimum grade point average of 3.0
- Upholding the highest standards of academic integrity and professional behavior

Funding is limited to a maximum of two years for MS students, to five years for five-year PhD students, and to four years for PhD students with master's degrees from other programs.

### ***Annual evaluation process***

- (a) The annual evaluation for funding process starts in January, with students providing an annual report detailing their activities and accomplishments over the previous

year; the Graduate Program Officer will provide forms and deadlines to students at the beginning of spring semester.

- (b) The Graduate Program Assistant will compile the annual report, transcripts, and Teaching/Research Assistant evaluations, distributing these materials to faculty in early February.
- (c) Faculty will meet later in February to evaluate students.
  - (i) In preparation for that meeting, faculty will place students into one of three ranked categories based on their paper record, although other information can be used to inform their ranking: (1) exceeds expectations, (2) meets expectations, and (3) exhibits reasons for concern. Faculty do not need to place any particular proportion of students in any particular category.
  - (ii) At the meeting, faculty will discuss the progress of students in the program, with emphasis on identifying students exhibiting reasons for concern.
  - (iii) The number of slots available for funding will be announced at the meeting, but not before the progress of all students has been determined. The Department Head in consultation with the faculty will decide on the appropriate balance between number of incumbent students to fund and size of incoming class.
  - (iv) Students in group 1 (exceeds expectations), group 2 (meets expectations), and group 3 (exhibits reasons for concern) will be ranked as necessary, and all students will be placed in one of three categories: funding, waiting list for funding, no funding.
  - (v) The Head of Department will mail funding letters to incumbent students. All students who receive no funding or are on the waiting list have the opportunity to meet with the Head of Department, Graduate Program Officer, and their advisor to discuss their evaluation and options.

### **Stopping the clock on funding**

Graduate students may request to have their funding clock stopped for either one or two semesters for any of the following reasons: (1) medical or family issues incompatible with normal progress in the program, (2) self- or externally-funded fieldwork that requires them to be away from campus (e.g., a Fulbright scholarship), or (3) opportunities for relevant professional experience (e.g., internships). Requests will go to the Graduate Program Officer and must be approved by the Head of Department; in the case of fieldwork and relevant professional opportunities, the student's master's program

committee or doctoral committee will make a recommendation to the Head of Department regarding the request. If approved, such pauses of the funding clock will not count against the student's expected total support from the Department. Students stopping the clock for the academic year (July to June) or for only the spring semester will restart their clock by signing their annual contract, and must do so by April 15. Students stopping the clock for the calendar year (January to December) or for only the fall semester must restart their clock by filing a formal letter with the Graduate Program Officer by November 15. Requests that do not fit these guidelines may still be directed to the Graduate Program Officer. All students contemplating stopping the funding clock should consult with the Graduate Program Officer to explore implications for medical insurance and other facets of the program.

### **Medical Insurance**

Penn State offers excellent medical insurance — including medical, dental, vision, and prescription drug benefits — for all Teaching Assistants, Research Assistants, internal fellowship winners, and external fellowship winners whose fellowship meets a certain threshold. (The current threshold is approximately \$32,000 per year; please see the Office of Graduate Fellowships and Award Administration to find out the details and to obtain the necessary form to request health coverage while holding an external fellowship.)

Students pay 20 percent of the medical insurance premiums through withholding from their monthly checks; the University subsidizes the remaining 80 percent. Subsidized benefits are also available for dependents at additional cost. Fall semester coverage runs from the beginning of fall semester in August to December 31; spring semester coverage runs from January 1 to the beginning of the next fall semester in August. For a complete description of the program, see <http://studentaffairs.psu.edu/health/services/insurance/>.

Students who are funded externally, either by their own funds, external sponsors, or external fellowships that fall below the per-year threshold, are still eligible to purchase the same insurance as our graduate assistants (see <http://studentaffairs.psu.edu/health/services/insurance/accidentSickness.shtml>). International students and dependents must comply with Penn State's Mandatory Health Insurance Requirement (see <http://studentaffairs.psu.edu/health/services/insurance/international.shtml>).

Graduate students who do fieldwork in foreign locations face particularly complex circumstances regarding medical insurance. If their fieldwork is part of a course or associated with a Research Assistantship, they are covered under the standard graduate student insurance plan. If their fieldwork is self-funded or is funded by external grant money (and no one source exceeds the current threshold of \$32,000), then prudence dictates that students should purchase medical insurance, although there is no regulation mandating this purchase. Students planning to conduct foreign fieldwork should consult the Graduate Program Officer to explore least-cost options, best coverage, and opportunities for assistance at least one semester before heading into the field. PLEASE

NOTE: Penn State requires all students to purchase HTH Worldwide (<http://www.hthstudents.com>) supplemental insurance for *all* international excursions, regardless of duration of other insurance coverage. The cost is approximately \$1 per day.

The Penn State Graduate Student Health Insurance Program provides information about graduate student insurance and is located at 302 Student Health Center. The phone number is 865-7467, the email address is [studentinsurance@sa.psu.edu](mailto:studentinsurance@sa.psu.edu), and the web page is <http://studentaffairs.psu.edu/health/services/insurance/graduate.shtml>.

## **Other Important Points**

Additional Work Outside of TA/RA Work. Per the original terms of offer that all incoming students sign, *graduate students cannot take on additional paid work outside of their TA or RA duties unless first obtaining written permission from the Department Head.*

Reimbursement of Graduate Travel Expenses. Upon completion of any University-funded travel, it is necessary to fill out and submit an *Employee Travel Reimbursement Form*, even if you do not qualify for reimbursement. Travelers must clearly note the purpose of the trip and, if the trip was to a conference, carefully specify their role at the conference on the appropriate line of the form. Information on travel requirements and forms are available in the departmental office or online at <http://www.geog.psu.edu/about-us/human-resources/travel>. Forms should be submitted to the office within one week of completing travel.

Forwarding Address, Cleaning Office, and Returning Keys. Upon graduation, students should leave a forwarding address with the Graduate Staff Assistant in 302 Walker Building or by sending an email to [geoggradsec@psu.edu](mailto:geoggradsec@psu.edu). Please note, however, that it is the student's responsibility to have mail forwarded to a new address. The Geography Department cannot forward mail. Before leaving Penn State, students must clean their office and research space and return all keys to the Department office.

## **Academic Integrity**

### ***Earth and Mineral Sciences Academic Integrity Statement***

Academic integrity is the pursuit of scholarly activity in an open, honest, and responsible manner. Academic integrity is a basic guiding principle for all academic activity in the College, and all members of the College are expected to act in accordance with this principle. Consistent with this expectation, all students should act with personal integrity; respect other students' dignity, rights, and property; and help create and maintain an environment in which all can succeed through the fruits of their efforts.

The highest standards of academic integrity are an absolute necessity for the successful pursuit of scholarly activities and research. Any violation of honesty in the College of EMS will not be tolerated and will be evaluated and punished in an appropriate and timely manner. Forms of academic dishonesty include, but are not limited to, cheating and copying on examinations, inappropriate collaboration on assignments, and tampering with another person's work. In addition, we are particularly concerned about violations of the research integrity of the College, such as all manners of plagiarism, the submission of previous work, the alteration or omission of relevant data, and electronic theft.

Academic integrity includes a commitment not to engage in or tolerate acts of falsification, misrepresentation, or deception. Such acts of dishonesty violate the fundamental ethical principles of the EMS community and compromise the worth of work completed by others. It is to protect the work of others and our own reputation that we will pursue and impose sanctions on the perpetrators.

### ***Sanctions***

Violations of academic integrity in the College of EMS are first dealt with at the prerogative of the individual course instructor, the Graduate Program Officer, and the Head of Department, in consultation with the student. Typical sanctions range from zero on the assignment or examination in question for a first occurrence or minor offense, to failure in the course for more serious or repeated occurrences. (Students are cautioned that failure in certain courses can lead to termination of the perpetrator's program of study.) A more extensive list of sanctions relevant to specific violations may be found on the EMS website ([http://www.ems.psu.edu/current\\_undergrad\\_students/academics/integrity\\_policy/precedent\\_tables](http://www.ems.psu.edu/current_undergrad_students/academics/integrity_policy/precedent_tables)). Should the course instructor or student wish to appeal or pursue that matter further, including the awarding of the XF grade, the violation may be brought before the EMS Academic Integrity Committee. The procedure for such action may be found in the *EMS College Academic Integrity Rules and Procedures*. Note that the final award of an XF grade, which is a disciplinary sanction, must include the concurrence of the individual course instructor, the EMS College Academic Integrity Committee, and the University Judicial Affairs Committee. The University Judicial Affairs Committee assigns this grade following a review of the case upon the request of the College committee.

**SELECTION OF PERMANENT ADVISOR:**

**Student Name:** \_\_\_\_\_

With mutual agreement, I have selected \_\_\_\_\_ as my permanent advisor.

\_\_\_\_\_  
Advisor's Signature

\_\_\_\_\_  
Date

Please return to Grad Staff Assistant in Geography Department office by last day of classes, your first semester.

**CHANGE OF GRADUATE ADVISOR:**

**Student Name:** \_\_\_\_\_

With mutual agreement, I have selected \_\_\_\_\_ as my new permanent advisor.

\_\_\_\_\_  
Advisor's Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Dept. Head's Signature

\_\_\_\_\_  
Date



# **Master's Program**

A master's degree in Geography is one stage in a process of lifelong learning. As a stage beyond the baccalaureate degree, the master's degree allows students to explore and specialize in the domain of geography. The mode of instruction (e.g., seminars and independent studies), the process of learning (e.g., the exercise of critical and independent judgment), and the responsibility for learning (e.g., self-motivated exercise of responsibility with the guidance of an advisor) reflect a qualitative change from the undergraduate experience. There are multiple outcomes of the master's degree including, but not restricted to: (1) continued graduate studies leading to a doctoral degree; or (2) professional service or employment with the possibility of continued graduate studies later.

The key characteristics of the Penn State master's degree in Geography are proficiency in the knowledge base of geography and a capacity to undertake independent, scholarly research.

The knowledge base comprises: (1) perspectives on the history and philosophy of modern geography; (2) an area of specialization selected by the student, and (3) quantitative and qualitative research methods appropriate to the student's area of specialization. We expect the student to develop and demonstrate expert knowledge in their chosen area of specialization. This expert knowledge must include an understanding of the connections to cognate fields beyond geography and an understanding of how the specialization relates to the domain of geography as a whole. The key is therefore depth within breadth. Exposure to the breadth of geography—its history, methods, concepts, and theories—is important, but the focus of the master's program is on the successful completion of a program of scholarly research. Breadth and depth are therefore necessary to the student's program but neither is sufficient by itself.

Depth within context underpins the research process that leads to either a master's thesis or two scholarly research papers. The student must be familiar with all stages of the research process from problem formulation through research design to analysis and writing. The resulting thesis or papers should be of a standard that could be published in a refereed journal (but not necessarily in geography itself).

Throughout the program, students are expected to participate in multiple activities that will broaden and deepen their understanding of geography. Through Graduate Teaching Assistantships, students are exposed to the fundamentals of teaching and the coordination of group and individual learning. Through Graduate Research Assistantships, they are exposed to all facets of the professional research process. Through Geography 500 and 502, students will gain an understanding of modern geography, including the role of Penn State faculty within the discipline at large. Through presentations in Coffee Hour and other forums, they are exposed to current ideas in geography and in intellectual life more generally. As a consequence of completing the master's degree program, students are expected to: (1) have a clear area of professional focus within geography, thus allowing them to identify research questions, to select relevant methodologies and research designs, and to employ appropriate modes for the presentation of results; (2) set their specialization within the larger context of the domain of geography; (3) have experience

in independent, scholarly research; and (4) have developed skills for continuous learning and professional development. The entry committee and master's program committee will facilitate this process.

### **Master's Program Committee**

Students must select a master's advisor by the Friday before Thanksgiving. The student then completes the master's program committee by selecting two additional faculty members during the spring semester. The master's program committee consists of an advisor, a second reader, and a third committee member. The student will work with this committee throughout the master's program and the committee will guide and monitor performance. The master's program committee will be appointed by the Graduate Program Officer with approval of a formal written statement, prepared jointly by the student and advisor, that outlines (a) the nature of the program of work and study, and (b) the expected role of the committee members throughout the program (form follows). Changes to the master's program committee can be made subject to the approval of the Graduate Program Officer, who will consult with existing committee members before making the requested changes. Requests to change committee membership must be made in writing to the Graduate Program Officer.

Throughout the remainder of the student's program, the master's program committee is charged with meeting with the student and with advising and evaluating the research proposal. The advisor and second reader evaluate the final thesis. The advisor and second reader must be members of the Geography Graduate Faculty. The third committee member may be a faculty member from outside geography or a special outside reader (i.e., a non-Penn Stater approved by Graduate School).

The master's program committee will meet formally with the student at least two times. The first meeting is to defend the master's proposal and to confirm that the student has met breadth and communications skills requirements. This meeting should take place near the end of the student's first spring semester (pink form). The purpose of the second meeting is to go over the research accomplished by the student during the summer and to chart the course for the remainder of the student's program; it should take place by October 15 of the student's second fall semester (gold form).

### ***Forms at end of MS section***

- Appointment of Master's Committee (green)
  - *This form is resubmitted when/if committee changes.*
- Advisor Report on Master's Proposal Defense (pink)
  - *Advisor submits form to the Grad Staff Assistant with proposal copy attached.*
- Advisor Report on Second Master's Committee Meeting (gold)
  - *Advisor submits form to the Grad Staff Assistant.*

## Credits and Coursework

A student whose goal is an MS degree in geography may elect—with approval of his or her advisor—to take one of two options:

- (1) The MS *thesis option*, which requires completion of at least 30 graduate credits and the completion of a thesis
- (2) The MS *two-paper option*, which requires completion of 35 graduate credits and two research papers; the master’s research papers are usually expanded and refined versions of course or seminar papers that are of sufficiently high quality to be submitted to scholarly journals

Students who enter the MS program without a background in geography or with deficiencies in several systematic fields should expect to accumulate more than the minimum credit requirements. The Graduate School requires all MS programs to include at least:

- 12 credits of course work at 400- and 500-levels
- 18 credits of 500-, 600-, and/or 800-level work
- 6 credits of 600/610

No more than 6 credits of the 600/610-level work can be assigned a letter grade. Any remaining 600/610 credits are graded on a “research” (R) credit basis. Almost all full-time students accumulate additional R-grade 600 credits. For accounting purposes, please register in increments of 3 credits for GEOG 600/610. For example, a single semester’s transcript may look like:

| Course   | Credits | Grade |
|----------|---------|-------|
| GEOG 600 | 3       | A     |
| GEOG 600 | 3       | R     |
| GEOG 600 | 3       | R     |

In addition to these general requirements of the Graduate School, the Department of Geography requires all incoming master’s students to take GEOG 500 (3 credits), GEOG 502 (3 credits), and GEOG 590 (1 credit in fall and 1 credit in spring) in their first year. Master’s candidates also are required to register and complete work in at least one graduate-level seminar (500-level) among those offered by the Department of Geography. The seminar should carry at least three credits and result in a substantive paper. GEOG 500 and 502 do not meet this requirement. This seminar requirement should be satisfied during the first four semesters of residence.

## **Master's Proposal**

### ***Thesis Proposal***

Students must submit a written thesis proposal to their master's committee by September 1 of their second year and defend it before their committee no later than October 1. The Department strongly recommends that master's students schedule an earlier defense, especially those students planning to do fieldwork or other thesis research during their first summer (which is everybody). Defending the proposal after doing the research could result in the master's program committee negating the summer's work. Consequently, *the Department recommends completing the proposal defense by mid-May.*

The written proposal should meet normal scholarly standards for presentation and should not exceed 20 pages. The proposal is evaluated in a formal, private defense. Committee members must have at least 10 days to evaluate the proposal before the defense date. The committee will assess the feasibility of the proposed research and the student's preparation to undertake the necessary work. The committee will approve the proposal and/or recommend changes to the topic itself or request additional preparation. If necessary, the committee can request that the student resubmit the research proposal, for editorial changes, content changes, or both. The committee can also request an additional defense of the revised proposal. At the time of the proposal defense, the advisor will confirm progress on (1) remedial work specified at the entry interview and (2) communication requirements. The advisor submits a written report to the Graduate Staff Assistant within one week of the proposal defense (form follows) along with a copy of the proposal accepted by the committee for the student's file.

### ***Two-Paper Option Proposals***

The proposal process for the two-paper option will be advised by two committees of three faculty members each. The student's advisor will chair both committees. Two other faculty members with suitable expertise will be selected to advise each paper. (Note that the two committees may have the same members, reducing a potential of five members to three.) Selection and approval of the two committees will be made with the same form as for a three-person thesis committee (the green form). Two of the three committee members will sign off on the final papers. These final readers will be designated on the initial committee-approval forms, and they should be the two faculty members with expertise most closely related to the paper topic. Each paper must be evaluated by at least two members of the Geography Graduate Faculty.

Master's paper proposals are due September 1 of the student's second year. There are two options for paper proposals:

1. If a draft paper has been prepared before this date (often a draft exists as a seminar paper), then this draft may be considered to be part of the proposal. The draft paper will be augmented by a written preface that explains how the paper will be expanded and/or redirected to produce a publication-quality paper suitable

for submission to a scholarly journal. This explanation is expected to be two pages long at most, and the draft paper with the preface will be submitted to the committee for evaluation by September 1. The committee will meet with the student after the committee members have had at least ten days to evaluate the proposal.

2. If a draft paper has not yet been prepared, then a paper proposal will be submitted to the committee. The paper proposal should be no more than five pages in length. The proposal will include an explanation of the characteristics of the paper that establish its quality as suitable for scholarly publication. This proposal will be submitted to the committee by September 1. The committee will meet with the student after the committee members have had at least ten days to evaluate the proposal.

The proposals for the two-paper option will be defended in meetings with corresponding three-person committees. Each committee will approve the proposal prepared for them and/or recommend changes to the topic itself or request additional preparation. If necessary, a committee can request that the student revise and resubmit the proposal and then meet again for further discussion. The committees will provide written appraisals of the proposals to the student. The advisor will submit the proposal evaluation form (follows), with the paper proposals and/or prefaces attached, to the Graduate Staff Assistant by October 1. The advisor describes the outcome of these meetings on the pink form after the entire set of meetings has been completed. The advisor will also confirm progress on remedial requirements from the Entry Interview and communication requirements. The two proposals may be evaluated in one meeting or in separate meetings, depending on the overlap in the two committees and the preferences of the student and faculty.

### **Completing a Master's Thesis**

The subject, content, and organization of the thesis are matters to be settled between the student and his or her advisor and master's committee. The aim of the thesis should be to solve a meaningful geographic problem or group of problems. The thesis must be more than an organized compilation of facts or a series of lengthy descriptions.

The completed thesis must be approved by: (1) the student's advisor; (2) a pre-selected second reader drawn from the master's committee; (3) the Department Head; and (4) the Graduate School. The Department Head will review and sign the thesis only after the other two signatures have been obtained. Give the Department Head at least two weeks to review and sign the thesis; consult with the Department Head well in advance of submitting the thesis to him/her. Before preparing the thesis in its final form, consult the Graduate School's *Thesis Guide* (available at <http://www.gradsch.psu.edu/current/thesis.html>), which provides detailed information on the PDF option and how material is to be printed and bound. Do *not* use a previous thesis as a model for format.

A bound copy of the finished work must be filed with the department. This copy does not need to be printed on cotton paper (though it is appreciated).

Continuing students will not be allowed to enter the PhD program without having submitted a thesis copy to the Geography Department. The absolute deadline for completing the master's is the first day of the semester of entry to the PhD program, i.e., one week before classes begin in mid-August. The final thesis copy, signed by the advisor and second reader, must be given to the Head for approval two weeks before this date.

### **Completing Master's Research Papers**

Follow thesis format guidelines in preparation of the final papers. The two readers of each paper will assess the paper with direct reference to the proposal and that proposal's evaluation by the committee. The master's papers must be read and approved by the Department Head, who will inform the Graduate School that the work is acceptable. The Head must receive the papers after both readers have signed the papers and no less than two weeks before the deadline for final approval. One finished, bound copy of each paper is given to the department (the two papers may be bound together in the department copy). The bound copies must be submitted to the Geography Department before the student is allowed to progress toward the PhD, following the same deadlines cited above for the master's thesis.

### **Presentation of Master's Research**

At the end of the spring semester of their second year, all master's students are required to present their research in poster format at the Department's annual awards reception. Students will be notified about specific format requirements, but in general this event will be similar to an AAG poster session where presenters stay by their posters and respond to questions by faculty, grads, and guests.

### **Registration Requirements**

#### ***When All Degree Requirements Are Met Except Completion of the Thesis or Papers***

Resident Students Only. For MS students in residence who have met all degree requirements except completion of the thesis or papers (e.g., required courses, minimum credits, proposal defense), the Department requires registration for a minimum of one credit of on-campus research and writing (GEOG 600) each semester. Students who have registered for one or more credits during summer session need not enroll in the succeeding fall semester. However, if students do not complete the degree by the end of the fall semester, they will have to apply to resume studies in the spring semester. The Graduate Staff Assistant will assist in submitting this form to the Graduate School.

Non-Resident Students Only. For MS students not in residence who have met the degree requirements except for completion of the thesis or papers, the department requires registration for a minimum of one credit per semester in off-campus thesis research (GEOG 610) for each semester after completion of the minimum credits for graduation, including the final semester in which the thesis is presented and approved. If the student graduates at the end of the semester directly following approval (i.e., does not meet the Graduate School deadlines for the current semester but does complete the thesis before semester's end), no additional registration will be required. If the student fails to register each semester as required, he or she will be expected to register for the total number of credits due (one per semester) during the semester of final thesis preparation and submission. Exceptions will only be permitted by a written petition to the faculty.

### **Graduate School Time Limit**

The Graduate School allows eight years for completion of the master's degree. We hope you will finish much sooner!

The *Graduate Degree Programs Bulletin* of the Graduate School is an important source of information. Please read it thoroughly: <http://www.psu.edu/bulletins/whitebook/>.



## Example Program for a Two-year Master's Thesis Student with Half-time TA/RA Funding

### YEAR 1

#### Fall

- Attend Geography orientation the entire week before classes start; TAs attend TA workshop given by Schreyer Institute for Teaching Excellence
- Attend entry interview with entry committee on last day of orientation;  
*Student's Summary and advisor's Report to Grad Staff Assistant*
- Register for GEOG 500, 590, and additional credits before classes begin
- Select advisor by Friday before Thanksgiving; *gold form to Grad Staff Assistant*
- TAs and RAs meet with supervisor at end of semester to discuss performance; *form to be provided near end of fall semester; completed form goes to Grad Staff Assistant*

#### Spring

- Register for GEOG 502, 590, and additional credits before classes begin
- Complete annual progress report by January 31
- Select two additional faculty members to complete master's program committee; *green form to Graduate Staff Assistant*
- Meet with committee to defend thesis proposal and confirm that breadth and communications skills requirements are met; *pink evaluation form with proposal copy attached to Grad Staff Assistant*
- TAs and RAs meet with supervisor at end of semester to discuss performance; *form to be provided near end of spring semester; completed form goes to Grad Staff Assistant*

#### Summer

- Conduct thesis research
- RAs meet with supervisor at end of summer to discuss performance; *form to be provided near end of summer; completed form goes to Grad Staff Assistant*

### YEAR 2

#### Fall

- Register for 9 to 12 credits before classes begin; most or all of these credits can be GEOG 600/610
- Meet with committee by October 15, discuss summer's research, and plan crucial dates for thesis completion
- TAs and RAs meet with supervisor at end of semester to discuss performance; *form to be provided near end of fall semester; completed form goes to Grad Staff Assistant*

#### Spring

- Register for 9 to 12 credits; most or all of these credits can be GEOG 600/610
- Complete annual progress report by January 31
- Activate intent to graduate in late January
- Submit draft of thesis to advisor and to Graduate School for format review by early March
- Advisor and second reader read and sign final thesis; submit signed thesis to Department Head to read and sign by end of March/start of April (two weeks before Grad School deadline).
- Submit final thesis to Grad School in middle of April
- TAs and RAs meet with supervisor at end of semester to discuss performance; *form to be provided near end of spring semester; completed form goes to Grad Staff Assistant*
- Present MS research to department at poster session
- Submit bound copy of thesis to department
- Attend Graduate School commencement in early May

**Confirm Graduate School deadlines at: <http://www.gradsch.psu.edu/calendar/gradcal.html>**

## APPOINTMENT OF MASTER'S COMMITTEE

Student's Name: \_\_\_\_\_

What is the nature of your research?

---

---

---

---

---

---

---

---

**Committee Members:**

Advisor: \_\_\_\_\_

Second Reader: \_\_\_\_\_

Third Member: \_\_\_\_\_

How will each member contribute to your research program?

---

---

---

---

---

---

---

---

All members must receive research proposal no later than September 1 of third semester; student must defend proposal no later than October 1. The Department prefers the defense to be completed by mid-May (i.e., the end of the second semester).

Committee approved by: \_\_\_\_\_ Date \_\_\_\_\_  
Graduate Program Officer

# ADVISOR'S REPORT ON MASTER'S PROPOSAL DEFENSE

Student Name: \_\_\_\_\_

Meeting Date: \_\_\_\_\_

Committee Members Present: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_ Approved

\_\_\_\_\_ Approved with revisions as described below

\_\_\_\_\_ Not approved

Proposal Evaluation: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## Additional Progress Evaluation

Remedial Requirements (from Entry Interview): \_\_\_\_\_

\_\_\_\_\_

Communication Requirements: \_\_\_\_\_

\_\_\_\_\_

**Advisor's Signature** \_\_\_\_\_ **Date** \_\_\_\_\_

\*\*Attach proposal copy to this completed form and return to Graduate Staff Assistant, 302 Walker, by Oct. 1<sup>st</sup>.

**ADVISOR'S REPORT ON MASTER'S PROGRAM  
COMMITTEE SECOND-YEAR MEETING**

Student Name: \_\_\_\_\_

Meeting Date (on or before Oct 15<sup>th</sup>) : \_\_\_\_\_

Committee Members Present: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Discussed Progress to Date** \_\_\_\_\_

**Action Plan – Remainder of MS degree (include dates):**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Advisor's Signature** \_\_\_\_\_ **Date** \_\_\_\_\_

\*\*Return to Graduate Staff Assistant, 302 Walker, by Oct. 15<sup>th</sup>.

# **Doctoral Program**

The PhD is a different kind of degree than the master's degree. A doctoral candidate in geography must be capable of making original contributions to knowledge and scholarship. It is unlikely that a person will make such contributions unless he or she concentrates on a narrow and clearly defined field of study. We require, however, that doctoral candidates know more of geography than their particular specialties; thus, any aspirant for a doctorate must obtain master's training or its equivalent before being admitted to doctoral candidacy. In short, admission to doctoral candidacy is official recognition that a student's general foundation in the breadth of geography is satisfactory. Students then devote their attention to developing depth in chosen specialties.

Penn State Geography has three paths for PhD students:

1. A five-year PhD with MS degree, which is available to students who enter Penn State Geography's graduate program without a master's degree. These students are on an accelerated schedule and earn an MS along the way to the PhD. Students can opt out of the five-year PhD at any time and choose to finish the MS only. This pathway receives five years of departmental support.
2. A four-year PhD, which is available to those students who have already received a master's degree in another program either at Penn State or at another university. This pathway receives four years of departmental support.
3. An MS-to-PhD, which is available to Penn State Geography MS students who decide either to continue into the PhD program after they have started their master's program, or to return for the PhD after having graduated with the MS. Students on this path are not accelerated and therefore will usually require two years to earn the master's and four years to earn the doctorate. Although this is typically a six-year pathway, like the five-year PhD, this pathway receives a total of five years of departmental support (i.e., two for the MS and three for the PhD).

*The doctoral section of this handbook is split into two sections: one for the five-year PhD with MS degree, and one for both the four-year PhD and MS-to-PhD students. Make sure you are using the section that applies to you.*

The general requirements for a doctoral degree in geography are more rigorous than those for a master's degree. At the same time the greater flexibility of the doctoral program allows advanced students to pursue programs of study tailored to their special interests and needs.

All students admitted to the doctoral program will have an entry interview, including students who have a Penn State Geography master's degree. Students will formally select their permanent advisor by the Friday before Thanksgiving of their first semester.

## **Graduate School Requirements**

The *Graduate Degree Programs Bulletin* of the Graduate School is an important source of information. Please read it thoroughly: <http://www.psu.edu/bulletins/whitebook>

## **Language and Communication Skills Requirements**

The method of satisfying the communication skills requirement of the Department and the Graduate School will be jointly determined by the doctoral committee and the candidate as soon as possible after passing the candidacy examination. Progress on these requirements will be evaluated at the proposal meeting for those students who defend the proposal before taking the comprehensive examination. *For those students who elect to take the examination first, the doctoral committee must convene a special meeting to make sure the student has met the Graduate School's Language and Communication Skills requirement before the student takes the comprehensive examination.*

# Five-Year PhD with MS Degree

## Courses and Registration

A student on the five-year PhD path may elect—with approval of his or her advisor—one of two options for satisfying the MS degree requirements:

- (1) The MS *thesis option*, which requires completion of at least 30 graduate credits and a thesis during the first four semesters of study
- (2) The MS *paper option*, which requires completion of 35 graduate credits and a research paper during the first four semesters of study; the master's research paper *must* be submitted to a scholarly journal upon completion of the MS

Students who enter the program without a background in geography or with deficiencies in several systematic fields should expect to accumulate more than the minimum credit requirements in either option. To satisfy Graduate School requirements for the MS degree, students must take at least:

- 12 credits of course work at 400- and 500-levels
- 18 credits of 500-, 600-, and/or 800-level work
- 6 credits of 600/610

In addition to these general requirements of the Graduate School, the Department of Geography requires all incoming graduate students to take GEOG 500 (3 credits), GEOG 502 (3 credits), and GEOG 590 (1 credit in fall and 1 credit in spring) in their first year. Five-year PhD candidates also are required to register and complete work in at least two graduate-level seminars (500-level) among those offered by the Department of Geography. At least one of the two seminar's *must* be outside the field in which the student is working, e.g., if a student is specializing in human geography, then at least one of the courses must be in physical geography, geographic information science, or human-environment geography. (Note: the spirit of this requirement is not met by a human geographer taking a nature-society course on feminist political ecology or by a physical geographer taking a geographic information course on remote sensing of ice and snow.) Both seminars should carry at least three credits and result in a substantive paper. GEOG 500 and 502 do not meet this requirement. This two-seminar requirement should be satisfied during the first four semesters of residence.

Required coursework must be completed before earning the MS degree. Although there are no other formal course or seminar requirements for the doctorate, five-year PhD students are encouraged to take advanced courses in their area of study. Most students take both courses and seminars as part of their doctoral program, especially in preparation for comprehensive exams.



Students should register for research (600-level) credits when: preparing for candidacy and comprehensive exams; or writing or researching their MS projects (thesis or paper) or PhD dissertations. Before the comprehensive exams, many people choose to register only for GEOG 600 (on campus) or GEOG 610 (off-campus). After the comprehensives and while researching and writing their dissertations, students *must* register for GEOG 601 (on-campus) or GEOG 611 (off-campus), which have a special PhD dissertation preparation rate that is a fraction of the normal tuition (currently it is 23 percent of the normal tuition). *Post-comprehensive PhD students are discouraged from taking courses that are not required for their degrees because they currently cost the Department approximately \$700 per three credits; students must therefore seek permission from the Graduate Program Officer to take any course except 601/611 after passing the comprehensive exam.* PhD students must take at least 12 credits of GEOG 600/601/610/611 before graduating. No more than 18 credits of 600-level work can be assigned a letter grade (6 credits as an MS student and 12 credits as a PhD student). The remainder must be graded on an “R” research basis. Almost all full-time PhD students accumulate an excess of R-grade 600/601 credits. For grading purposes, please register in increments of 3 credits for GEOG 600/610. For example, a single semester’s transcript may look like this:

| Course   | Credits | Grade |
|----------|---------|-------|
| GEOG 600 | 3       | A     |
| GEOG 600 | 3       | A     |
| GEOG 600 | 3       | R     |

### **Master’s Program Committee**

Students must select a master’s advisor by the Friday before Thanksgiving of their first semester. The student then completes the master’s program committee by selecting two additional faculty members during the spring semester. The master’s program committee consists of an advisor and a second and third reader. Unlike the MS-only degree program, all three members of the MS committee in the five-year PhD program must be members of the Geography Graduate Faculty. The student will work with this committee throughout the master’s portion of the five-year PhD program and the committee will guide and monitor performance. The master’s program committee will be appointed by the Graduate Program Officer with approval of a formal written statement, prepared jointly by the student and advisor, that outlines (a) the nature of the program of work and study, and (b) the expected role of the committee members throughout the MS portion of the program (form follows). Changes to the master’s program committee can be made subject to the approval of the Graduate Program Officer, who will consult with existing committee members before making the requested changes. Requests must be made in writing to the Graduate Program Officer.

The master’s program committee is charged with meeting with the student and with advising and evaluating the research proposal. The master’s program committee will

meet formally with the student at least two times. The first meeting is to defend the master's proposal and assess the student's efforts to address remedial requirements from the entry interview; unlike the MS-only program, assessment of the student's efforts to address communication requirements takes place around the time of the comprehensive examination. This meeting should take place near the end of the student's first spring semester (pink form). The purpose of the second meeting is to go over the research accomplished by the student during the summer and to chart the course for the remainder of the MS portion of the student's program; it should take place by October 15 of the student's second fall semester (gold form).

All three committee members must approve the final thesis or paper at a formal master's project defense, at which point there are three options for the committee: (1) to approve the MS degree and approve continuation into the PhD program; (2) to approve the MS degree but not to approve continuation into the PhD program; (3) not to approve the MS degree at this time, but to give the opportunity to revise and re-defend for subsequent approval for the MS only. Note that it is likely that if the committee approves the MS degree, it will still require students to undertake revisions before signing off on the thesis or paper. Those revisions must be completed and submitted to the Department Head two weeks before the first day of orientation week in August (i.e., three weeks before the beginning of the fall semester). The Department Head must sign off on the thesis or paper no later than the first day of orientation week.

### ***Forms at end of MS portion of the five-year PhD with MS section***

- Appointment of Master's Committee (green)
  - *This form is resubmitted when/if committee changes.*
- Advisor's Report on Master's Proposal Defense (pink)
  - *Advisor submits form to the Grad Staff Assistant with proposal copy attached.*
- Advisor's Report on Second Master's Committee Meeting (gold)
  - *Advisor submits form to the Grad Staff Assistant.*
- Advisor's Report on Master's Defense (yellow)
  - *Advisor submits form to the Grad Staff Assistant.*
- Advisor's Report on Paper Submission (blue)
  - *Advisor submits form to the Grad Staff Assistant.*

## **Master's Proposal**

### ***Thesis Proposal***

Students must submit a written thesis proposal to their master's committee by September 1 of their second year and defend it before their committee no later than October 1. The Department strongly recommends that master's students schedule an earlier defense, especially those students planning to do fieldwork or other thesis research during their first summer (which is everybody). Defending the proposal after doing the research could

result in the master's program committee negating the summer's work. Consequently, the Department recommends completing the proposal defense by mid-May.

The written proposal should meet normal scholarly standards for presentation and should not exceed 20 pages. The proposal is evaluated by the master's program committee in a formal defense. Committee members must have at least 10 days to evaluate the proposal before the defense date. The committee will assess the feasibility of the proposed research and the student's preparation to undertake the necessary work. The committee will approve the proposal and/or recommend changes to the topic itself or request additional preparation. If necessary, the committee can request that the student resubmit the research proposal, for editorial changes, content changes, or both. The committee can also request an additional defense of the revised proposal. At the time of the proposal defense, the advisor will confirm progress on (1) remedial work specified at the entry interview and (2) communication requirements. The advisor submits a written report of the evaluation to the Graduate Staff Assistant within one week of the proposal defense (form follows) along with a copy of the proposal accepted by the committee for the student's file.

### ***Paper Proposal***

Master's paper proposals are due September 1 of the student's second year. The paper proposal will be submitted to the master's committee and should not exceed twenty pages in length. The proposal will include an explanation of the characteristics of the paper that establish its quality as suitable for scholarly publication. It must also identify the journal to which the paper will be submitted for publication and defend this choice. This proposal will be submitted to the committee by September 1 and defended by October 1. *As in the case of the thesis option, students are urged to defend their paper proposals by mid-May.* The committee will meet with the student after the committee members have had at least ten days to evaluate the proposal.

The proposal for the paper option will be defended in a meeting with the student's committee. The committee will assess the feasibility of the proposed research and the student's preparation to undertake the necessary work. The committee will approve the proposal and/or recommend changes to the topic itself or request additional preparation. If necessary, the committee can request that the student resubmit the research proposal, for editorial changes, content changes, or both. The committee can also request an additional defense of the revised proposal. At the proposal defense, the student and his or her committee must agree on a journal to which the student will submit the paper for publication. At the time of the proposal defense, the advisor will confirm progress on remedial work specified at the entry interview. The advisor submits a written report to the Graduate Staff Assistant within one week of the proposal defense (form follows) along with a copy of the proposal accepted by the committee for the student's file.

## Completing Master's Research

### *Thesis option*

The subject, content, and organization of the thesis are matters to be settled between the student and his or her advisor and master's committee. The aim of the thesis should be to solve a meaningful geographic problem or group of problems. The thesis must be more than an organized compilation of facts or a series of lengthy descriptions.

The completed thesis must be: (1) formally defended in front of the student's three-person master's committee and approved by that committee; (2) approved by the Department Head; and (3) approved by the Graduate School. The latest date for the thesis defense is 15 May of the second year in the five-year PhD program. Advisors submit the form, "Advisor's Report on Master's Defense" upon completion of the defense. The Department Head will review and sign the thesis only after the student has successfully defended the thesis and obtained signatures from the three master's committee members. The Department Head requires at least two weeks to review and sign the thesis; consult with the Department Head well in advance of submitting the thesis to him/her to make sure he/she is available. Before preparing the thesis in its final form, consult the Graduate School's *Thesis Guide* (available at <http://www.gradsch.psu.edu/current/thesis.html>), which provides detailed information on the PDF option and how material is to be printed and bound. Do *not* use a previous thesis as a model for format.

A bound copy of the finished work must be filed with the department. This copy does not need to be printed on cotton paper (though it is appreciated).

Continuing students will not be allowed to enter the PhD program without having submitted a thesis copy to the Geography Department. The absolute deadline for completing the master's degree (i.e., obtaining approval of the Department Head) is the first day of the semester of entry to the PhD program (i.e., one week before classes begin in mid-August).

### *Paper option*

The subject, content, and organization of the master's paper are matters to be settled between the student and his or her advisor and master's committee. The aim of the paper should be to solve a meaningful geographic problem. The paper must be more than an organized compilation of facts or a series of lengthy descriptions and must be suitable for submission to a refereed journal. The paper must be submitted for publication upon successful defense of the paper (see form at end of section).

The completed paper must be: (1) formally defended in front of the student's three-person master's committee and approved by that committee; (2) approved by the Department Head; and (3) approved by the Graduate School. The latest date for the paper defense is 15 May of the second year in the five-year PhD program. Advisors submit the

form, “Advisor’s Report on Master’s Defense” upon completion of the defense. The Department Head will review and sign-off on the paper only after the student has successfully defended it and obtained signatures from the three master’s committee members. The Department Head will inform the Graduate School that the work is acceptable. The Department Head requires at least two weeks to review and sign the paper; consult with the Department Head well in advance of submitting the paper to him/her to make sure he/she is available.

A bound copy of the finished work must be filed with the department. This copy does not need to be printed on cotton paper (though it is appreciated). Although this is not a thesis, before binding, consult the Graduate School’s *Thesis Guide* (available at <http://www.gradsch.psu.edu/current/thesis.html>), which provides detailed information on how material is to be printed and bound. Do *not* use a previous thesis or paper as a model for format.

Continuing students will not be allowed to enter the PhD program without having submitted a copy of the paper to the Geography Department for its archives. The absolute deadline for completing the master’s degree (i.e., obtaining approval of the Department Head) is the first day of the semester of entry to the PhD program (i.e., one week before classes begin in mid-August).

The expectation is for continuing five-year PhD students to submit the paper for publication soon after the Department Head has approved it. It is strongly recommended that the paper be submitted before classes resume in fall. Advisor’s confirm that student’s submitted the paper with the form, “Advisor’s Report on Paper Submission.”

### **Presentation of Master’s Research**

At the end of the spring semester of their second year, all five-year PhD students are required to present their master’s research in poster format at the Department’s annual awards reception. Students will be notified about specific format requirements, but in general this event will be similar to an AAG poster session where presenters stay by their posters and respond to questions by faculty and grads.

## APPOINTMENT OF MASTER'S COMMITTEE

Student's Name: \_\_\_\_\_

What is the nature of your research?

---

---

---

---

---

---

---

---

**Committee Members:**

Advisor: \_\_\_\_\_

Second Reader: \_\_\_\_\_

Third Reader: \_\_\_\_\_

How will each member contribute to your research program?

---

---

---

---

---

---

---

---

All members must receive research proposal no later than September 1 of third semester; student must defend proposal no later than October 1. The Department prefers the defense to be completed by mid-May (i.e., the end of the second semester).

Committee approved by: \_\_\_\_\_ Date \_\_\_\_\_  
Graduate Program Officer

## ADVISOR'S REPORT ON MASTER'S PROPOSAL DEFENSE

Student Name: \_\_\_\_\_

Meeting Date: \_\_\_\_\_

Committee Members Present: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_ Approved

\_\_\_\_\_ Approved with revisions as described below

\_\_\_\_\_ Not approved

Proposal Evaluation: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Remedial Requirements** (from Entry Interview):

\_\_\_\_\_  
\_\_\_\_\_

**Target Journal for Paper Option:**

\_\_\_\_\_

**Advisor's Signature** \_\_\_\_\_ **Date** \_\_\_\_\_

\*\*Attach proposal copy to this completed form and return to Graduate Staff Assistant, 302 Walker, by Oct. 1<sup>st</sup>.

**ADVISOR'S REPORT ON MASTER'S PROGRAM  
COMMITTEE SECOND-YEAR MEETING**

Student Name: \_\_\_\_\_

Meeting Date (on or before Oct 15<sup>th</sup>): \_\_\_\_\_

Committee Members Present: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Discussed Progress to Date** \_\_\_\_\_

**Action Plan – Remainder of MS degree (include dates):**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Advisor's Signature** \_\_\_\_\_ **Date** \_\_\_\_\_

\*\*Return to Graduate Staff Assistant, 302 Walker, by Oct. 15<sup>th</sup>.



**ADVISOR'S REPORT ON MASTER'S DEFENSE  
Five-year PhD Program**

Student Name: \_\_\_\_\_

Meeting Date: \_\_\_\_\_

Committee Members Present: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_ Approve the MS degree and approve continuation into the PhD program

\_\_\_\_\_ Approve the MS degree but do not approve continuation into the PhD program

\_\_\_\_\_ Do not to approve the MS degree at this time

Thesis/Paper Evaluation: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Advisor's Signature** \_\_\_\_\_ **Date** \_\_\_\_\_

\*\*Return to Graduate Staff Assistant, 302 Walker, by 15 May.

**ADVISOR'S REPORT ON PAPER SUBMISSION**  
**Five-year PhD Program, Paper Option**

Student Name: \_\_\_\_\_

Submission Date: \_\_\_\_\_

Journal: \_\_\_\_\_

**Advisor's Signature** \_\_\_\_\_ **Date** \_\_\_\_\_

\*\*Return to Graduate Staff Assistant, 302 Walker.

## Doctoral Candidacy Committee and Examination

### *Function of the candidacy exam*

The doctoral candidacy exam is a requirement of the Graduate School, and the unit administering the exam determines its function, format, and timing. In the Geography Department, PhD students advance to candidacy when they demonstrate the intellectual capacity to think analytically and critically in their field of expertise and to understand and apply ideas from other fields of geography to their research domain. The format of the exam and the composition of the examining committee both assist students in demonstrating this intellectual capacity and enable the examining committee to assess this capacity.

### *Format of the examining committee and candidacy exam*

A committee of three, formally appointed by the Graduate Program Officer, will administer the doctoral candidacy exam to students admitted to the PhD program. Students must select the examining committee from those members of the Department who hold Graduate Faculty status. Organizing the candidacy exam involves a four-step process.

First, students will write a research statement of no more than one and one half (1.5) pages in length. The research statement describes students' intended doctoral research path and its relationship to all of the broad research fields in geography: human geography, physical geography, nature-society geography, and geographic information science. The research statement can also include discussion of a place or region in which students have interest, but place or region cannot substitute for a substantive research focus.

Second, students will assemble the candidacy committee, which will consist of the advisor and faculty members from two other broad research fields of geography. For example, if the advisor is a human geographer, then the other committee members must be from two of the other three broad fields of geography practiced in the Department (in this case, physical geography, nature-society/human-environment geography, and geographic information science). Students must meet with potential candidacy committee members, share their research statement, and identify a theme around which all three examiners will direct their questions. Exam themes can vary considerably, but should reflect student interests described in the statement and yet accommodate the expertise (for instance, biogeography or cartography) of the faculty members serving on the candidacy committee. This step will take time to address, so five-year PhD students should start assembling their candidacy committees before Spring Break of their second year to insure completion of the committee by the end of the spring semester. By the last day of classes before spring break, five-year PhD students submit the following gold form with only the names of the provisional candidacy committee to the Graduate Program Officer for approval.

Please note: it is possible, but unlikely that the three members of the master's committee can serve as the three members of the candidacy committee because they must be from three distinct fields of geography. One object of the candidacy exam is to assess the student's breadth of knowledge across the discipline; master's committees tend to be focused more on assessing the student's mastery of research skills and therefore to have members who are more likely to be in just one field of geography.

Third, students will prepare the following blue form, "Appointment of Doctoral Candidacy Committee," and present it to the Graduate Program Officer *at least two months before the candidacy examination date*. The form includes the 1.5-page research statement, the names of the three candidacy committee members, and a description of the theme in six words or less. Once the Graduate Program Officer confirms and signs off on the candidacy committee, a period of two months must elapse before the student takes the exam. During that time, students will visit with their committee members to discuss the exam theme and likely directions of questioning.

*Fourth, no less than three weeks before the candidacy exam, students must file the following green form, "Schedule Doctoral Candidacy Examination" with the Graduate Staff Assistant. Please note that **this is a Graduate School requirement with no flexibility**. Failure to submit this form to the Graduate Staff Assistant will result in the delay of the examination.*

The candidacy exam is an oral, closed examination. Questions and answers do not require memorization of facts, but instead require students to think analytically and critically by understanding and articulating responses to the questions asked by the committee. The exam requires approximately two hours and has six possible outcomes, as shown on the Graduate School form, "Advisor's Report on Doctoral Candidacy." Students must provide this form to their advisor no later than the time of the examination.

### ***Timing of the candidacy exam***

For five-year PhD students, the doctoral candidacy exam must take place after the MS thesis or paper defense, but as soon after that defense as possible. The reason for this requirement is that students must complete their master's degree before they can take the candidacy exam. Five-year PhD students must establish the candidacy committee (gold form) by spring break of the second year. They must submit their candidacy plan (blue form) two months before the date of the exam. For five-year PhD students, the exam must be completed by 15 October of the third year in the program. In other words, five-year PhD students who complete their MS degree at the mid-August deadline must submit their candidacy plan to the Graduate Program Officer immediately.

### ***Forms at end of PhD section***

- Provisional Doctoral Candidacy Committee (gold)
- Appointment of Doctoral Candidacy Committee (blue)
- Schedule Doctoral Candidacy Examination (green)

- Advisor's Report on Doctoral Candidacy (green)  
- *Department form, advisor submits to Graduate Staff Assistant.*
- Report on Doctoral Candidacy (green)  
- *Graduate School form that the Graduate Staff Assistant submits based on advisor's report.*

## **Doctoral Committee**

Each five-year PhD student's doctoral committee should be established after the student has passed the candidacy exam and no later than the end of the fifth semester of residence (Fall semester of Year 3), unless the student has taken but not passed his or her candidacy examination by that time. In that case, the doctoral committee is to be appointed no later than the end of the semester in which the candidacy examination is passed and three weeks before the proposal defense or comprehensive examination, whichever comes first. It is unwise to wait that late to appoint the doctoral committee.

The doctoral committee consists of at least four members from Penn State, with one (typically known as the "outside member" or the "external member") from another unit that has no budgetary affiliation with Geography. It is possible to have additional special committee members from outside Penn State. Members of the doctoral committee are formally appointed by the Dean of the Graduate School on the recommendation of the Graduate Program Officer. All committee members must be members of the Graduate Faculty at Penn State, except for special committee members from outside the university.

The doctoral committee is responsible for all facets of the doctoral program (i.e., the plan of study, the timing of exams and the proposal, and the timing of the dissertation). The committee evaluates performance on examinations, evaluates the dissertation proposal, and supervises the dissertation. Each student's doctoral program should be formulated in consultation with his or her doctoral committee. *The committee should meet no later than six months after passage of the candidacy examination to approve the student's doctoral program.* The program may be modified as necessary, providing the committee approves.

*Students must complete the Selection of Doctoral Committee form and return it to the Graduate Staff Assistant immediately after the first meeting with the committee and well before scheduling the comprehensive exam or proposal defense.* Once the form has been completed, the Graduate Staff Assistant will create the Committee Appointment Signature Form. The student is required to sign this form and will have each of the committee members sign the form as well. Once all the signatures have been obtained, it is returned to the Graduate Staff Assistant who will obtain the Graduate Program Officer's signature and will then forward it to the Graduate School. *This form needs to be forwarded to the Graduate School well before the student schedules the Comprehensive Exam because the Graduate School checks whether committee members are authorized to serve in their roles.*

*The Graduate School requires all doctoral committees to meet at least once per year.* The comprehensive exam serves as the meeting in the year in which it takes place – usually

year 3. Unless the student is away doing fieldwork, the committee meetings in years 4 and 5 should take place in the fall semester before October 15. (Use the bright green forms — one for year 4 and one for year 5). Permission to hold this meeting later in the academic year must be given by the Graduate Program Officer.

### ***Forms at end of PhD section***

- Selection of Doctoral Committee (orange)
  - *Given to the Graduate Staff Assistant to create a signature form for the student to obtain signatures.*
- Graduate Student Committee Policies and Procedures (orange)
- Committee Appointment Signature Form (orange)
  - *Two-page Graduate School form that the Graduate Staff Assistant creates from the Selection of Doctoral Committee form submitted by each student.*
- Advisor's Report on First Post-Comps Doctoral Committee Meeting (bright green)
- Advisor's Report on Second Post-Comps Doctoral Committee Meeting (bright green)

### **Order of the Dissertation Proposal and Comprehensive Examination**

The order of the dissertation proposal and comprehensive examination is to be determined by the graduate candidate and her/his advisor. *The comprehensive examination cannot be scheduled until the student has met the Graduate School's Language and Communication Skills requirement.* When the dissertation proposal precedes the comprehensive examination, the doctoral committee determines whether this requirement has been met at the proposal meeting and the advisor documents the committee's agreement on the proposal meeting report form (see below). At that meeting, the committee also determines the dates of the written and oral portions of the comprehensive exam and confirms the order of questioning. When the comprehensive examination precedes the proposal meeting, then the doctoral committee must hold a special meeting to make sure the student has met the Graduate School's Language and Communication Skills requirement. At that meeting, the committee also determines the dates of the written and oral portions of the comprehensive exam and confirms the order of questioning.

The Department recommends that the dissertation proposal and comprehensive examination closely coincide in time, with three weeks being the typical time between these milestones. In those cases in which the dissertation proposal precedes the comprehensive examination, however, there should be no less than two weeks between acceptance of the proposal and beginning of the written portion of the exam. In those cases in which the student and advisor determine that the proposal should follow the comprehensive exam, the proposal defense should take place by May of their third year. However, if there are sound scholarly or practical reasons to delay defense of the thesis proposal, students can defend it no later than 15 October of the fourth year (i.e., the seventh semester) with signed permission of the Graduate Program Officer. Holding the proposal defense after the summer is not to the student's advantage because any summer

field or laboratory research will not have the formal approval of the doctoral committee.

## **Dissertation Proposal**

Before dissertation work can begin, the candidate for the degree must write a dissertation proposal in consultation with the advisor and members of the doctoral committee. The proposal will be discussed at a dedicated proposal meeting. This meeting is not a formal defense mandated by the Graduate School, but it is formal in the sense that the Department requires a meticulous proposal and rigorous analysis of the theory, methods, research plan, and significance that form the basis of the proposal. The doctoral committee can require multiple revisions and additional meetings until they accept the dissertation proposal.

A proposal should include a statement of the research question, the methods to be used in the research, an analysis plan, and a statement of the significance of the work. The proposal should be approximately 20 double-spaced pages. The advisor writes a brief report on the proposal meeting for the candidate's file and attaches a copy of the accepted proposal to the report.

If the proposal meeting precedes the comprehensive examination, the committee must confirm that the student has met the Graduate School's Language and Communication Skills requirement at the proposal meeting, which the advisor acknowledges as part of the proposal meeting report. The committee should also determine the dates of the written and oral portions of the comprehensive exam and confirm the order of questioning at the proposal meeting.

If there is a change in dissertation topic or if there is a major revision of the original proposal (e.g., a change from a quantitative to qualitative research design), another formal meeting of the dissertation committee must be held to approve such changes. Consult with the Graduate Program Officer if in doubt about the need for additional committee meetings to revise the proposal.

### ***Forms at end of PhD section***

- Advisor's Report on Dissertation Proposal Meeting (pink)  
- *A copy of the proposal is attached to this form for the student's file.*

## **Comprehensive Examination**

*As mandated by the Graduate School, this exam must be formally scheduled (see attached forms). Scheduling can take place when a doctoral candidate has met the Graduate School's Language and Communication Skills requirement. The comprehensive examination must be completed by May of the student's third year; in those cases in which the student and advisor determine that the proposal should follow the Comprehensive Examination, the proposal meeting must take place before 15 October of*

the fourth year (i.e., the seventh semester), although the Department strongly recommends that the proposal meeting takes place no later than the end of May of the third year. *A student's eligibility for financial support for the fourth year is dependent upon successful completion of the comprehensive exam.*

The exam is officially scheduled by the Dean of the Graduate School upon recommendation of the student's doctoral committee through the Graduate Program Officer. The departmental Graduate Staff Assistant will assist in submitting the form for requesting Graduate School scheduling of this exam (form follows). *The Graduate School requires three weeks notice for scheduling the oral portion of the exam; the Graduate School does not make exceptions except in extraordinary circumstances.* To give the Graduate Staff Assistant time to file the necessary paperwork, *the yellow Schedule Doctoral Comprehensive Examination form is due four weeks before the oral exam date. Failure to meet this deadline will result in delay of the exam.*

Questions on the comprehensive exam are given by at least four faculty members and address at least two substantive areas of study. Each student should meet individually with members of his or her doctoral committee to discuss the general question areas and identify specific preparation at least one semester before planning to take the comprehensive exam. In general, for five-year PhD students, these individual meetings should take place soon after the candidacy exam and the identification of the doctoral committee members.

The examination is administered in two parts, written and oral. The written examination period lasts four days, with each day allotted to a question or questions from an individual committee member (i.e., a four-member committee produces a four-day exam). The student and committee can organize the written examination for Monday-Thursday or Tuesday-Friday (i.e., four consecutive days); for Monday, Tuesday, Thursday, and Friday (i.e., two days on, one day off, and two days on); or Thursday, Friday, Monday, Tuesday (i.e., two days on, the weekend off, and two days on). Following the writing period—usually about a week to ten days later—the candidate meets with the entire committee for an oral examination, which lasts about three hours and is closed.

A favorable vote of at least two-thirds of the members of the doctoral committee is required for passing the comprehensive exam. If a candidate fails the exam, the committee can fail the student outright or can choose to give the student the opportunity to take the exam again. If it allows the student to retake the exam, the committee must determine (1) if the student needs to retake portions of the exam or the entire exam, and (2) how long the student has to prepare for re-examination. A candidate who passes and who has already had the doctoral proposal accepted by the committee may devote full time to the dissertation from that point forward; a candidate who has not had the dissertation proposal meeting must meet with the committee and gain acceptance of the proposal.



Students are encouraged not to take further course work except for GEOG 601/611, thesis research, and required courses. Any courses taken after the comprehensive exam require formal permission of the Graduate Program Officer. Students who take other courses without seeking this permission will be responsible for paying the roughly \$700 fee charged by the University.

### **Forms at end of PhD section**

- Schedule Doctoral Comprehensive Examinations (yellow)
- Examination Request Form (yellow)
  - Graduate School form to schedule oral comprehensive examination.
- Report on Comprehensive Examination of a Doctoral Candidate (yellow)
  - Graduate School form; Graduate Staff Assistant prepares version to be signed at exam.

### **Residency Requirements**

There is no minimum number of required credits or semesters of study, but over some twelve-month period during the interval between admission to the PhD program and completion of the PhD program, the candidate must spend at least two semesters (which may include the semester in which the candidacy exam is taken) as a registered full-time student. Note that summer session is not normally counted as a semester. For example, students who take their candidacy exam in the fall semester can complete the residence requirement by registering for nine credits in the fall semester and for nine credits in the following spring semester. The Graduate School requires that continuous fall/spring registrations be kept current until graduation and not be paid in arrears at some later date. See the *Graduate Degree Programs Bulletin* for more detail.

### **Graduate School Time Limit**

The Graduate School allows eight years for completion of the doctoral degree, from the time of candidacy (i.e., passing the candidacy exam) to conclusion of the doctoral defense, with six years allowed between passing the comprehensive exam and the doctoral defense. If more than six years elapse between the comprehensive and doctoral defense exams, a second comprehensive exam must be administered (see *Graduate Degree Programs Bulletin*).

### **Doctoral Dissertation**

The doctoral dissertation must represent a significant contribution to knowledge. It must be presented in a scholarly manner, reveal an ability by the candidate to do independent research of high quality, and indicate considerable experience in using a variety of research techniques. It should also demonstrate the candidate's ability to express her- or himself precisely, concisely, and in an interesting manner.

The content and mode of presentation of a dissertation are decided by the candidate in consultation with the advisor and the doctoral committee. As noted previously, the candidate will present a formal dissertation proposal to his or her committee for approval before initiating research on the proposed topic.

The Graduate School enforces a variety of detailed regulations about the format of finished dissertations. To avoid last minute frustrations, candidates must familiarize themselves with the regulations in the *Thesis Guide*, available at the Graduate School office in Kern Building or at <http://www.gradsch.psu.edu/current/thesis.html>. Do not use a previous dissertation as a model format.

### **Doctoral Defense—The Final Oral Examination**

This examination is conducted by the candidate's doctoral committee. It is officially scheduled and announced by the Dean of the Graduate School. *Two weeks' notice is required by the Graduate School to schedule this exam. To give the Graduate Staff Assistant time to file this paperwork, the gray Schedule Doctoral Defense Examination form is due three weeks before the date of the exam.* This examination is largely concerned with the doctoral dissertation itself, but questions may range over the candidate's entire field of specialization and study. The dissertation must be presented to the committee in final form (complete with figures, tables, appendices, etc.) at least two weeks before the examination.

The first part of the doctoral defense is open to the public and candidates are responsible for distributing an announcement of the time, place, and title by e-mail to the department community at least one week prior to the exam. The second part of the exam is closed to the public and consists of the candidate and doctoral committee.

The examination is graded on a pass-fail basis. A favorable vote of at least two-thirds of the members of the doctoral committee is required for passing. If a candidate fails, it is the committee's responsibility to determine whether, and when, the student may repeat the defense. If a candidate passes, it is normal for the committee to require revisions, which can range from minor (e.g., typographical and spelling errors) to major (reworking an analysis or rewriting one or more chapters). The committee typically will sign the signature page at the defense when requiring only minor revisions, but usually will not sign until satisfied by major revisions. If major revisions are required, the committee will determine at the dissertation defense whether they will meet again with the student.

The dissertation must be in final form with a signature page signed by the entire committee before submitting it for the Department Head's approval no less than two weeks before the deadline for final submission.

A PDF version of the complete dissertation must be filed in the Graduate School office by the announced deadline before the Commencement at which the candidate expects to receive the degree. The advisor accompanies the PhD student on stage at commencement, so schedule coordination is essential. One bound copy of the dissertation must be filed with the department.

***Forms at end of PhD section***

- Change of Doctoral Committee (orange)
  - *This should be given to the Graduate Staff Assistant to create a signature form for the student to obtain the signature of any new member added to the committee.*
- Schedule Doctoral Defense Examination (gray)
- Report on the final oral examination of a Doctoral Candidate (gray)
  - *Graduate School form; the Graduate Staff Assistant will prepare a version to be signed at the defense.*

## **Example Program for a Five-year PhD Student with Half-time TA or RA Funding**

### **YEAR 1**

#### **Fall**

- Attend Geography orientation the entire week before classes start; TAs attend TA workshop given by Schreyer Institute for Teaching Excellence
- Attend entry interview with entry committee on last day of orientation;  
*Student's Summary and advisor's Report to Grad Staff Assistant*
- Register for GEOG 500, 590, and additional credits before classes begin
- Select advisor by Friday before Thanksgiving; *gold form to Grad Staff Assistant*
- TAs and RAs meet with supervisor at end of semester to discuss performance; *form to be provided near end of fall semester; completed form goes to Grad Staff Assistant*

#### **Spring**

- Register for GEOG 502, 590, and additional credits before classes begin
- Complete annual progress report by January 31
- Select two additional faculty members to complete master's program committee; *green form to Graduate Staff Assistant*
- Meet with committee to defend thesis/paper proposal; *pink evaluation form with proposal copy attached to Grad Staff Assistant*
- TAs and RAs meet with supervisor at end of semester to discuss performance; *form to be provided near end of spring semester; completed form goes to Grad Staff Assistant*

#### **Summer**

- Conduct MS thesis or MS paper research
- RAs meet with supervisor at end of summer to discuss performance; *provided form goes to Grad Staff Assistant*

### **YEAR 2**

#### **Fall**

- Register for 9 to 12 credits before classes begin; most or all of these credits can be GEOG 600/610
- Meet with committee by October 15, discuss summer's research, and plan crucial dates for MS thesis or MS paper completion
- TAs and RAs meet with supervisor at end of semester to discuss performance; *form to be provided near end of fall semester; completed form goes to Grad Staff Assistant*

#### **Spring**

- Register for 9 to 12 credits; most or all of these credits can be GEOG 600/610
- Activate intent to graduate with MS by middle of January
- Complete annual progress report by January 31
- Select other two candidacy committee members by last day before spring break; *gold Provisional Doctoral Candidacy Committee form*
- Submit draft of thesis or MS paper to advisor and to Graduate School for format review by early March
- Defend thesis or MS paper; advisor submits *Advisor's Report on Master's Defense* form; student submits signed thesis or paper to Department Head to read and sign by end of March/start of April (two weeks before Grad School deadline).
- Submit "Appointment of Doctoral Candidacy Committee" form; *blue form to Graduate Program Officer two months before candidacy exam*
- Submit final thesis or MS paper to Grad School in middle of April
- Present MS research to department at poster session

- Submit bound copy of thesis or MS paper to department
- Submit paper to journal for possible publication; advisor submits *Advisor's Report on Paper Submission* form
- TAs and RAs meet with supervisor at end of semester to discuss performance; *form to be provided near end of spring semester; completed form goes to Grad Staff Assistant*

### **Summer**

- Take candidacy exam; candidacy committee evaluates performance and also confirms progress on communications skills requirement; *Advisor reports on green form; Grad Staff Assistant submits Grad School form*
- Select doctoral committee; *orange form to Grad Staff Assistant*
- Conduct pilot dissertation research
- RAs meet with supervisor at end of summer to discuss performance; *provided form goes to Grad Staff Assistant*

## **YEAR 3**

### **Fall**

- Register for 9 to 12 credits before classes begin
- Meet with doctoral committee to update them on summer work and to confirm program plans
- Discuss comprehensive exam topics with each committee member and prepare for exam
- TAs and RAs meet with supervisor at end of semester to discuss performance; *form to be provided near end of fall semester; completed form goes to Grad Staff Assistant*

### **Spring**

- Register for 9 to 12 credits before classes begin
- Complete annual progress report by Jan. 31
- Present dissertation proposal to doctoral committee in formal meeting (before comprehensive exam; note: student and advisor can choose to have doctoral proposal meeting after comprehensive exam); *advisor reports on pink form to the Grad Staff Assistant with proposal copy attached to be placed in student's file*
- Schedule comprehensive exam; *yellow form to Grad Staff Assistant three weeks before exam; Grad Staff Assistant submits form to Grad School*
- Take comprehensive exam (4 days writing with oral exam one week to 10 days later); *Grad School evaluation form to Grad Staff Assistant*
- TAs and RAs meet with supervisor at end of semester to discuss performance; *form to be provided near end of spring semester; completed form goes to Grad Staff Assistant*

### **Summer**

- Conduct dissertation research
- RAs meet with supervisor at end of summer to discuss performance; *provided form goes to Grad Staff Assistant*

## **YEAR 4**

### **Fall**

- Register for 9 to 12 credits before classes begin
- Meet with doctoral committee before October 15 to discuss dissertation progress and plans
- Continue research as necessary
- TAs and RAs meet with supervisor at end of semester to discuss performance; *form to be provided near end of fall semester; completed form goes to Grad Staff Assistant*

**Spring**

- Register before classes begin
- Continue research as necessary
- TAs and RAs meet with supervisor at end of semester to discuss performance; *form to be provided near end of spring semester; completed form goes to Grad Staff Assistant*

**Summer**

- Continue research as necessary
- RAs meet with supervisor at end of summer to discuss performance; *provided form goes to Grad Staff Assistant*

**YEAR 5****Fall**

- Register before classes begin
- Meet with doctoral committee before October 15 to discuss dissertation progress and plans
- Continue research as necessary
- Start writing dissertation
- TAs and RAs meet with supervisor at end of semester to discuss performance; *form to be provided near end of fall semester; completed form goes to Grad Staff Assistant*

**Spring**

- Register for 9 to 12 credits before classes begin
- Activate intent to graduate by middle of January
- Complete annual progress report by Jan. 31
- Finish writing dissertation
- Submit partial draft of dissertation to graduate school for format review
- Get agreement from advisor and committee that dissertation defense may be scheduled (advisor and usually all committee members have read drafts); *schedule defense gray form to Grad Staff Assistant and Grad School*
- Present completely finished dissertation to committee two weeks before defense (all figures, appendices, etc.)
- Announce defense one week before scheduled date (email to all grads and faculty)
- Defend dissertation; *Grad School evaluation form to Grad Staff Assistant*
- Make revisions and submit final dissertation with all signatures to Department Head to read and sign in first week of April
- Submit final dissertation to Grad School in middle of April
- Submit bound copy of dissertation to Department
- Attend Graduate School commencement at end of finals week in May

**Confirm Graduate School deadlines at: <http://www.gradsch.psu.edu/calendar/gradcal.html>**

# Four-Year PhD

The following guidelines apply to four-year PhD and MS-to-PhD students.

## Courses and Registration

In their first year, new four-year PhD students must take GEOG 500 in fall, 502 in spring, and GEOG 590 in both semesters. Students continuing from the MS have met these requirements. Four-year PhD candidates also are required to register and complete work in at least two graduate-level seminars (500-level) among those offered by the Department of Geography. At least one of the two seminar's *must* be outside the field in which the student is working, e.g., if a student is specializing in human geography, then at least one of the courses must be in physical geography, geographic information science, or human-environment geography. (Note: the spirit of this requirement is not met by a human geographer taking a nature-society course on feminist political ecology or by a physical geographer taking a geographic information course on remote sensing of ice and snow.) Both seminars should carry at least three credits and result in a substantive paper. GEOG 500 and 502 do not meet this requirement. This two-seminar requirement should be satisfied during the first four semesters of residence. Beyond these courses, there are no formal course or seminar requirements for the doctorate, although PhD students are encouraged to take advanced courses in their area of study. Most students take both courses and seminars as part of their doctoral program, especially in preparation for comprehensive exams.

Before the comprehensive exams, many people choose to register for GEOG 600 (on campus) or GEOG 610 (off-campus). After the comprehensives and while researching and writing their dissertations, students register for GEOG 601 (on-campus) or GEOG 611 (off-campus), which have a special PhD dissertation preparation rate that is a fraction of the normal tuition (currently it is 23 percent of the normal tuition). *Post-comprehensive PhD students are discouraged from taking courses that are not required for their degrees because they currently cost the Department approximately \$700 per three credits; students must therefore seek permission from the Graduate Program Officer to take **any** course except 601/611 after passing the comprehensive exam.* PhD students must take at least 12 credits of GEOG 600/601/610/611, but no more than 12 credits of 600-level work can be assigned a letter grade. The remainder must be graded on an “R” research basis. Almost all full-time PhD students accumulate R-grade 600/601 credits. For grading purposes, please register in increments of 3 credits for GEOG 600/610. For example, a single semester’s transcript may look like this:

| Course   | Credits | Grade |
|----------|---------|-------|
| GEOG 600 | 3       | A     |
| GEOG 600 | 3       | A     |
| GEOG 600 | 3       | R     |

## Doctoral Candidacy Committee and Examination

### *Function of the candidacy exam*

The doctoral candidacy exam is a requirement of the Graduate School, and the unit administering the exam determines its function, format, and timing. In the Geography Department, PhD students advance to candidacy when they demonstrate the intellectual capacity to think analytically and critically in their field of expertise and to understand and apply ideas from other fields of geography to their research domain. The format of the exam and the composition of the examining committee both assist students in demonstrating this intellectual capacity and enable the examining committee to assess this capacity.

### *Format of the examining committee and candidacy exam*

A committee of three, formally appointed by the Graduate Program Officer, will administer the doctoral candidacy exam to students admitted to the PhD program. Students must select the examining committee from those members of the Department who hold Graduate Faculty status. Organizing the candidacy exam involves a four-step process.

First, students will write a research statement of no more than one and one half (1.5) pages in length. The research statement describes students' intended research path and its relationship to one or more of the broad research fields in geography: human geography, physical geography, nature-society geography, and geographic information science. The research statement can also include discussion of a place or region in which students have interest, but place or region cannot substitute for a substantive research focus.

Second, students will assemble the candidacy committee, which will consist of the advisor and faculty members from two other broad research fields of geography. For example, if the advisor is a human geographer, then the other committee members must be from two of the other three broad fields of geography practiced in the Department (in this case, physical geography, nature-society geography, and geographic information science). Students must meet with potential candidacy committee members, share their research statement, and identify a theme around which all three examiners will direct their questions. Exam themes can vary considerably, but should reflect student interests described in the statement and yet accommodate the expertise (for instance, biogeography or cartography) of the faculty serving on the committee. Examples of exam themes could include such diverse topics as mountaintop removal mining, local climate change impacts, or emergency response. This step will take time to address, so students should start assembling their committees no later than Thanksgiving of their first year to insure completion of the committee by the end of the fall semester. By the last day of classes in the fall semester, four-year PhD students submit the following gold form with only the names of the provisional candidacy committee to the Graduate Program Officer for approval.



Third, students will prepare the following blue form, “Appointment of Doctoral Candidacy Committee,” and present it to the Graduate Program Officer at least two months before the candidacy examination date. The form includes the 1.5-page research statement, the names of the three candidacy committee members, and a description of the theme in six words or less. Once the Graduate Program Officer confirms and signs off on the candidacy committee, a period of two months must elapse before the student takes the exam. During that time, students will visit with their committee members to discuss the exam theme and likely directions of questioning. For practical purposes, students should submit this form to the Graduate Program Officer by Spring Break of Year 1.

*Fourth, no less than three weeks before the candidacy exam, students must file the following green form, “Schedule Doctoral Candidacy Examination” with the Graduate Staff Assistant. Please note that **this is a Graduate School requirement with no flexibility.** Failure to submit this form to the Graduate Staff Assistant will result in the delay of the examination.*

The candidacy exam is an oral, closed examination. Questions and answers do not require memorization of facts, but instead require students to think analytically and critically by understanding and articulating responses to the questions asked by the committee. The exam requires approximately two hours and has six possible outcomes, as shown on the Graduate School form, “Advisor’s Report on Doctoral Candidacy.” Students must provide this form to their advisor no later than the time of the examination.

### ***Timing of the candidacy exam***

For four-year PhD students, the doctoral candidacy exam can take place any time during the first year of the PhD program, but students typically take the exam during spring semester. Students must establish the candidacy committee before the end of fall semester. Four-year PhD students must complete the exam by May of the first year in the program.

### ***Forms at end of PhD section***

- Provisional Doctoral Candidacy Committee (gold)
- Appointment of Doctoral Candidacy Committee (blue)
- Schedule Doctoral Candidacy Examination (green)
- Advisor’s Report on Doctoral Candidacy (green)  
- *Department form, advisor submits to Graduate Staff Assistant.*
- Report on Doctoral Candidacy (green)  
- *Graduate School form that the Graduate Staff Assistant submits based on advisor’s report.*

## Doctoral Committee

Each four-year PhD student's doctoral committee should be established after the student has passed the candidacy exam and no later than the end of the second semester of residence, unless the student has taken but not passed his or her candidacy examination by that time. In that case, the doctoral committee is to be appointed no later than the end of the semester in which the candidacy examination is passed and three weeks before the proposal defense or comprehensive examination, whichever comes first. It is unwise to wait that late to appoint the doctoral committee.

The doctoral committee consists of at least four members from Penn State, with one (typically known as the "outside member" or the "external member") from another unit that has no budgetary affiliation with Geography. It is possible to have additional special committee members from outside Penn State. Members of the doctoral committee are formally appointed by the Dean of the Graduate School on the recommendation of the Graduate Program Officer. All committee members must be members of the Graduate Faculty at Penn State, except for special committee members from outside the university.

The doctoral committee is responsible for all facets of the doctoral program (i.e., the plan of study, the timing of exams and the proposal, and the timing of the dissertation). The committee evaluates performance on examinations, evaluates the dissertation proposal, and supervises the dissertation. Each student's doctoral program should be formulated in consultation with his or her doctoral committee. *The committee should meet no later than six months after passage of the candidacy examination to approve the student's doctoral program.* The program may be modified as necessary, providing the committee approves.

*Students must complete the Selection of Doctoral Committee form and return it to the Graduate Staff Assistant immediately after the first meeting with the committee and well before scheduling the comprehensive exam or proposal defense.* Once the form has been completed, the Graduate Staff Assistant will create the Committee Appointment Signature Form. The student is required to sign this form and will have each of the committee members sign the form as well. Once all the signatures have been obtained, it is returned to the Graduate Staff Assistant who will obtain the Graduate Program Officer's signature and will then forward it to the Graduate School. *This form needs to be forwarded to the Graduate School well before the student schedules the Comprehensive Exam because the Graduate School checks whether committee members are authorized to serve in their roles.*

The Graduate School requires all doctoral committees to meet at least once per year. The comprehensive exam serves as the meeting in year 2. Unless the student is away doing fieldwork, the committee meetings in years 3 and 4 should take place in the fall semester before October 15. (Use the bright green forms; one for year 3 and one for year 4).

### ***Forms at end of PhD section***

- Selection of Doctoral Committee (orange)
  - *Given to the Graduate Staff Assistant to create a signature form for the student to obtain signatures.*
- Graduate Student Committee Policies and Procedures (orange)
- Committee Appointment Signature Form (orange)
  - *Two-page Graduate School form that the Graduate Staff Assistant creates from the Selection of Doctoral Committee form submitted by each student.*
- Advisor's Report on First Post-Comps Doctoral Committee Meeting (bright green)
- Advisor's Report on Second Post-Comps Doctoral Committee Meeting (bright green)

### **Order of the Dissertation Proposal and Comprehensive Examination**

The order of the dissertation proposal and comprehensive examination is to be determined by the graduate candidate and her/his advisor. *The comprehensive examination cannot be scheduled until the student has met the Graduate School's Language and Communication Skills requirement.* When the dissertation proposal precedes the comprehensive examination, the doctoral committee determines whether this requirement has been met at the proposal meeting and the advisor documents the committee's agreement on the proposal meeting report form (see below). At that meeting, the committee also determines the dates of the written and oral portions of the comprehensive exam and confirms the order of questioning. When the comprehensive examination precedes the proposal meeting, then the doctoral committee must hold a special meeting to make sure the student has met the Graduate School's Language and Communication Skills requirement. At that meeting, the committee also determines the dates of the written and oral portions of the comprehensive exam and confirms the order of questioning.

The Department recommends that the dissertation proposal and comprehensive examination closely coincide in time, with three weeks being the typical time between these milestones. In those cases in which the dissertation proposal precedes the comprehensive examination, however, there should be no less than two weeks between acceptance of the proposal and beginning of the written portion of the exam. In those cases in which the student and advisor determine that the proposal should follow the comprehensive exam, the proposal defense should take place by May of their second year. However, if there are sound scholarly or practical reasons to delay defense of the thesis proposal, students can defend it no later than 15 October of the third year (i.e., the fifth semester) with signed permission of the the Graduate Program Officer. Holding the proposal defense after the summer is not to the student's advantage because any summer field or laboratory research will not have the formal approval of the doctoral committee.

## **Dissertation Proposal**

Before dissertation work can begin, the candidate for the degree must write a dissertation proposal in consultation with the advisor and members of the doctoral committee. The proposal will be discussed at a dedicated proposal meeting. This meeting is not a formal defense mandated by the Graduate School, but it is formal in the sense that the Department requires a meticulous proposal and rigorous analysis of the theory, methods, research plan, and significance that form the basis of the proposal. The doctoral committee can require multiple revisions and additional meetings until they accept the dissertation proposal.

A proposal should include a statement of the research question, the methods to be used in the research, an analysis plan, and a statement of the significance of the work. The proposal should be approximately 20 double-spaced pages. The advisor writes a brief report on the proposal meeting for the candidate's file and attaches a copy of the accepted proposal to the report.

If the proposal meeting precedes the comprehensive examination, the committee must confirm that the student has met the Graduate School's Language and Communication Skills requirement at the proposal meeting, which the advisor acknowledges as part of the proposal meeting report. The committee should also determine the dates of the written and oral portions of the comprehensive exam and confirm the order of questioning at the proposal meeting.

If there is a change in dissertation topic or if there is a major revision of the original proposal (e.g., a change from a quantitative to qualitative research design), another formal meeting of the dissertation committee must be held to approve such changes. Consult with the Graduate Program Officer if in doubt about the need for additional committee meetings to revise the proposal.

### ***Forms at end of PhD section***

- Advisor's Report on Dissertation Proposal Meeting (pink)  
- *A copy of the proposal is attached to this form for the student's file.*

## **Comprehensive Examination**

*As mandated by the Graduate School, this exam must be formally scheduled (see attached forms).* Scheduling can take place when a doctoral candidate has met the Graduate School's Language and Communication Skills requirement. *The comprehensive examination must be completed by May of the student's second year;* in those cases in which the student and advisor determine that the proposal should follow the Comprehensive Examination, the proposal meeting must take place before 15 October of the third year (i.e., the fifth semester), although the Department strongly recommends that the proposal meeting takes place no later than the end of May of the second year. *A student's eligibility for financial support for the third year is dependent upon successful*

*completion of the comprehensive exam.* The exam is officially scheduled by the Dean of the Graduate School upon recommendation of the student's doctoral committee through the Graduate Program Officer. The departmental Graduate Staff Assistant will assist in submitting the form for requesting Graduate School scheduling of this exam (form follows). *The Graduate School requires three weeks notice for scheduling the oral portion of the exam; the Graduate School does not make exceptions except in extraordinary circumstances.* To give the Graduate Staff Assistant time to file the necessary paperwork, *the yellow Schedule Doctoral Comprehensive Examination form is due **four** weeks before the oral exam date.*

Questions on the comprehensive exam are given by at least four faculty members and address at least two substantive areas of study. Each student should meet individually with members of his or her doctoral committee to discuss the general question areas and identify specific preparation at least one semester before planning to take the comprehensive exam. In general, these individual meetings should take place early in the fall semester of the second year.

The examination is administered in two parts, written and oral. The written examination period lasts four days, with each day allotted to a question or questions from an individual committee member (i.e., a four-member committee produces a four-day exam). The student and committee can organize the written examination for Monday-Thursday or Tuesday-Friday (i.e., four consecutive days); for Monday, Tuesday, Thursday, and Friday (i.e., two days on, one day off, and two days on); or Thursday, Friday, Monday, Tuesday (i.e., two days on, the weekend off, and two days on). Following the writing period—usually about a week to ten days later—the candidate meets with the entire committee for an oral examination, which lasts about three hours and is closed.

A favorable vote of at least two-thirds of the members of the doctoral committee is required for passing the comprehensive exam. If a candidate fails the exam, the committee can fail the student outright or can choose to give the student the opportunity to take the exam again. If it allows the student to retake the exam, the committee must determine (1) if the student needs to retake portions of the exam or the entire exam, and (2) how long the student has to prepare for re-examination. A candidate who passes and who has already had the doctoral proposal accepted by the committee may devote full time to the dissertation from that point forward; a candidate who has not had the dissertation proposal meeting must meet with the committee and gain acceptance of the proposal.

Students are encouraged not to take further course work except for GEOG 601/611, thesis research, and required courses. *Any other courses require formal permission of the Graduate Program Officer. Students who take other courses without seeking this permission will be responsible for paying the roughly \$700 fee charged by the University.*

### ***Forms at end of PhD section***

- Schedule Doctoral Comprehensive Examinations (yellow)
- Examination Request Form (yellow)
  - *Graduate School form to schedule oral comprehensive examination.*
- Report on Comprehensive Examination of a Doctoral Candidate (yellow)
  - *Graduate School form; Graduate Staff Assistant prepares version to be signed at exam.*

### **Residency Requirements**

There is no minimum number of required credits or semesters of study, but over some twelve-month period during the interval between admission to the PhD program and completion of the PhD program, the candidate must spend at least two semesters (which may include the semester in which the candidacy exam is taken) as a registered full-time student. Note that summer session is not normally counted as a semester. For example, students who take their candidacy exam in the fall semester can complete the residence requirement by registering for nine credits in the fall semester and for nine credits in the following spring semester. The Graduate School requires that continuous fall/spring registrations be kept current until graduation and not be paid in arrears at some later date. See the *Graduate Degree Programs Bulletin* for more detail.

### **Graduate School Time Limit**

The Graduate School allows eight years for completion of the doctoral degree, from the time of candidacy (i.e., passing the candidacy exam) to conclusion of the doctoral defense, with six years allowed between passing the comprehensive exam and the doctoral defense. If more than six years elapse between the comprehensive and doctoral defense exams, a second comprehensive exam must be administered (see *Graduate Degree Programs Bulletin*).

### **Doctoral Dissertation**

The doctoral dissertation must represent a significant contribution to knowledge. It must be presented in a scholarly manner, reveal an ability by the candidate to do independent research of high quality, and indicate considerable experience in using a variety of research techniques. It should also demonstrate the candidate's ability to express her- or himself precisely, concisely, and in an interesting manner.

The content and mode of presentation of a dissertation are decided by the candidate in consultation with the advisor and the doctoral committee. As noted previously, the candidate will present a formal dissertation proposal to his or her committee for approval before initiating research on the proposed topic.

The Graduate School enforces a variety of detailed regulations about the format of finished dissertations. To avoid last minute frustrations, candidates must familiarize

themselves with the regulations in the *Thesis Guide*, available at the Graduate School office in Kern Building or at <http://www.gradsch.psu.edu/current/thesis.html>. Do not use a previous dissertation as a model format.

### **Doctoral Defense—The Final Oral Examination**

This examination is conducted by the candidate's doctoral committee. It is officially scheduled and announced by the Dean of the Graduate School. *Two weeks' notice is required by the Graduate School to schedule this exam. To give the Graduate Staff Assistant time to file this paperwork, the gray Schedule Doctoral Defense Examination form is due three weeks before the date of the exam.* This examination is largely concerned with the doctoral dissertation itself, but questions may range over the candidate's entire field of specialization and study. The dissertation must be presented to the committee in final form (complete with figures, tables, appendices, etc.) at least two weeks before the examination.

The first part of the doctoral defense is open to the public and candidates are responsible for distributing an announcement of the time, place, and title by e-mail to the department community at least one week prior to the exam. The second part of the exam is closed to the public and consists of the candidate and doctoral committee.

The examination is graded on a pass-fail basis. A favorable vote of at least two-thirds of the members of the doctoral committee is required for passing. If a candidate fails, it is the committee's responsibility to determine whether, and when, the student may repeat the defense. If a candidate passes, it is normal for the committee to require revisions, which can range from minor (e.g., typographical and spelling errors) to major (reworking an analysis or rewriting one or more chapters). The committee typically will sign the signature page at the defense when requiring only minor revisions, but usually will not sign until satisfied by major revisions. If major revisions are required, the committee will determine at the dissertation defense whether they will meet again with the student.

The dissertation must be in final form with a signature page signed by the entire committee before submitting it for the Department Head's approval no less than two weeks before the deadline for final submission.

A PDF version of the complete dissertation must be filed in the Graduate School office by the announced deadline before the Commencement at which the candidate expects to receive the degree. The advisor accompanies the PhD student on stage at commencement, so schedule coordination is essential. One bound copy of the dissertation must be filed with the department. It is customary, but not required, for PhD students to present committee members with bound copies of the dissertation.

#### ***Forms at end of PhD section***

- Change of Doctoral Committee (orange)

*- This should be given to the Graduate Staff Assistant to create a signature form for the student to obtain the signature of any new member added to the committee.*

- Schedule Doctoral Defense Examination (gray)

- Report on the final oral examination of a Doctoral Candidate (gray)

- Graduate School form; the Graduate Staff Assistant will prepare a version to be signed at the defense.*



## Example Program for a Four-year PhD Student with Half-time TA or RA Funding

### YEAR 1

#### Fall

- Attend Geography orientation the entire week before classes start; TAs attend TA workshop given by Schreyer Institute for Teaching Excellence
- Attend entry interview with entry committee on last day of orientation week; *student's Summary and advisor's Report to Grad Staff Assistant.*
- Register for GEOG 500, 590, and additional credits before classes begin
- Select advisor by Friday before Thanksgiving; *gold form to Grad Staff Assistant*
- Select two other candidacy committee members by last day of classes; gold *Provisional Doctoral Candidacy Committee* form
- TAs and RAs meet with supervisor at end of semester to discuss performance; *form to be provided near end of fall semester; completed form goes to Grad Staff Assistant*

#### Spring

- Register for GEOG 502, 590 and additional credits before classes begin
- Complete annual progress report by January 31
- Submit "Appointment of Doctoral Candidacy Committee" form; *blue form to Graduate Program Officer two months before candidacy exam*
- Take candidacy exam; candidacy committee evaluates performance and also confirms progress on communications skills requirement; *Advisor reports on green form; Grad Staff Assistant submits Grad School form*
- Select doctoral committee; *orange form to Grad Staff Assistant*
- TAs and RAs meet with supervisor at end of semester to discuss performance; *form to be provided near end of spring semester; completed form goes to Grad Staff Assistant*

#### Summer

- Conduct pilot dissertation research
- RAs meet with supervisor at end of summer to discuss performance; *provided form goes to Grad Staff Assistant*

### YEAR 2

#### Fall

- Register for 9 to 12 credits before classes begin; most or all of these credits can be GEOG 600/610
- Meet with doctoral committee to confirm program plans
- Discuss comprehensive exam topics with each committee member
- TAs and RAs meet with supervisor at end of semester to discuss performance; *form to be provided near end of fall semester; completed form goes to Grad Staff Assistant*

#### Late Fall or Spring

- Present dissertation proposal to doctoral committee in formal meeting (before comprehensive exam; note: student and advisor can choose to have doctoral proposal meeting after comprehensive exam); *advisor reports on pink form to the Grad Staff Assistant with proposal copy attached to be placed in student's file*

#### Spring

- Register for 9 to 12 credits; most or all of these credits can be GEOG 600/610
- Complete annual progress report by Jan. 31
- Schedule comprehensive exam; *yellow form to Grad Staff Assistant three weeks before exam; Grad Staff Assistant submits form to Grad School*
- Take comprehensive exam (4 days writing with oral exam one week to 10 days later); *Grad School evaluation form to Grad Staff Assistant*
- TAs and RAs meet with supervisor at end of semester to discuss performance; *form to be provided near end of spring semester; completed form goes to Grad Staff Assistant*

## **Summer**

- Conduct dissertation research
- RAs meet with supervisor at end of summer to discuss performance; *provided form goes to Grad Staff Assistant*

## **YEAR 3**

### **Fall**

- Register for 9 to 12 credits before classes begin
- Meet with doctoral committee to discuss dissertation progress and plans
- Continue research as necessary
- TAs and RAs meet with supervisor at end of semester to discuss performance; *provided form goes to Grad Staff Assistant*

### **Spring**

- Register for 9 to 12 credits before classes begin
- Continue research as necessary
- TAs and RAs meet with supervisor at end of semester to discuss performance; *provided form goes to Grad Staff Assistant*

## **Summer**

- Conduct dissertation research
- RAs meet with supervisor at end of summer to discuss performance; *provided form goes to Grad Staff Assistant*

## **YEAR 4**

### **Fall**

- Register for 9 to 12 credits before classes begin
- Meet with doctoral committee before October 15 to discuss dissertation progress and plans
- Continue research as necessary
- Start writing dissertation
- TAs and RAs meet with supervisor at end of semester to discuss performance; *provided form goes to Grad Staff Assistant*

### **Spring**

- Register for 9 to 12 credits before classes begin
- Activate intent to graduate by middle of January
- Complete annual progress report by Jan. 31
- Finish writing dissertation
- Submit partial draft of dissertation to graduate school for format review
- Get agreement from advisor and committee that dissertation defense may be scheduled (advisor and usually all committee members have read drafts); schedule defense *gray form to Grad Staff Assistant and Grad School*
- Present completely finished dissertation to committee two weeks before defense (all figures, appendices, etc.)
- Announce defense one week before scheduled date (email to all grads and faculty)
- Defend dissertation; *Grad School evaluation form to Grad Staff Assistant*
- Make revisions and submit final dissertation with all signatures to Department Head to read and sign in first week of April
- Submit final dissertation to Grad School in middle of April
- Submit bound copy of dissertation to Department
- Attend Graduate School commencement at end of finals week in May

**Confirm Graduate School deadlines at: <http://www.gradsch.psu.edu/calendar/gradcal.html>**

**PROVISIONAL DOCTORAL CANDIDACY COMMITTEE**

Student Name \_\_\_\_\_

Provisional Doctoral Candidacy Examination Committee:

Advisor: \_\_\_\_\_

Other Members: \_\_\_\_\_

\_\_\_\_\_

\*\*\*\*\*

Request not approved for the following reason:

\*\*\*\*\*

Request approved as stated above.

\*\*\*\*\*

\_\_\_\_\_  
Graduate Program Officer

\_\_\_\_\_  
Date

## **APPOINTMENT OF DOCTORAL CANDIDACY COMMITTEE**

Research Statement: Describe your intended research path and its relationship to one or more of the broad research fields in geography: human geography, physical geography, nature-society geography, or geographic information science. This statement can also include discussion of a place or region in which the student has interest, but place or region cannot substitute for a substantive research focus. Please type the statement in the following space.

Student Name \_\_\_\_\_

Examination theme (six words or less): \_\_\_\_\_

Doctoral Candidacy Examination Committee:

Advisor: \_\_\_\_\_

Other Members: \_\_\_\_\_

\_\_\_\_\_

\*\*\*\*\*

Request not approved for the following reason:

\*\*\*\*\*

Request approved as stated above.

\*\*\*\*\*

\_\_\_\_\_  
Graduate Program Officer

\_\_\_\_\_  
Date

## **SCHEDULE DOCTORAL CANDIDACY EXAMINATION**

**\*\* You must be registered for the semester during which the exam is scheduled (including summers).**

**Student Name** \_\_\_\_\_ **Student #** \_\_\_\_\_

**Advisor** \_\_\_\_\_

**DOCTORAL CANDIDACY EXAM** (oral) on (date) \_\_\_\_\_

during the following hours \_\_\_\_\_ in room \_\_\_\_\_.

## ADVISOR'S REPORT ON DOCTORAL CANDIDACY

Student Name: \_\_\_\_\_

Date of Evaluation: \_\_\_\_\_

Please mark one of the following three boxes based on the conditions listed below each examination outcome. If the student is not an *Unconditional Pass*, specify the student's status in a letter you give to the student (attach a copy to this form).

The student passed the candidacy examination and should now be considered an official doctoral student.

1a. ***Unconditional pass*** – Admission to candidacy is granted without reservation.

1b. ***Conditional pass*** – The student is admitted to candidacy and no reexamination is required. Minor gaps in the student's preparation can be remedied by readings or courses. The candidate's doctoral committee will supervise the necessary work. A copy of the letter to the student to this effect is attached.

The student failed the candidacy examination, but will be given the opportunity to retake it. A copy of the letter to the student to this effect is attached.

2a. ***Partial fail with partial reexamination*** – The reexamination will be confined to the topics in which significant deficiency exists. The program designed to remedy the deficiency will be prescribed by the doctoral candidacy committee. The doctoral committee will not be appointed, and formal doctoral work does not begin until the deficiency has been remedied and a reexamination taken and passed.

2b. ***Failure with option for reexamination*** – A student whose general preparation is inadequate will be advised to take another examination after a period of preparation. The student will be limited to a maximum of two examinations.

The student failed the candidacy examination, and will **NOT** be given the opportunity to retake it. The department has rejected the student as a doctoral candidate. A copy of the letter to the student to this effect is attached.

3a. ***Failure without option for reexamination***

3b. ***Recommendation***, in appropriate cases (e.g., for those without a master's degree in geography), to complete a master's degree in geography at Penn State, prior to retaking the PhD candidacy exam.

---

Is “**program terminated by department**” to appear on the transcript?  yes  no

Was this the first attempt at candidacy?  yes  no

Will the student continue to seek the master's degree?  yes  no

Committee Members Present: \_\_\_\_\_, \_\_\_\_\_,

\_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

Advisor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## SELECTION/CHANGE OF DOCTORAL COMMITTEE

Student Name \_\_\_\_\_ Student # \_\_\_\_\_

- *Please include the Department for any member outside of the Geography Dept.*

Chairperson and Advisor: \_\_\_\_\_

Co-Chairperson (if necessary): \_\_\_\_\_

Major Members: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Outside Members: \_\_\_\_\_

\_\_\_\_\_

Minor Field Members: \_\_\_\_\_

\_\_\_\_\_

Special Members: \_\_\_\_\_

\_\_\_\_\_



**ADVISOR'S REPORT ON DISSERTATION PROPOSAL  
MEETING**

Student Name: \_\_\_\_\_

Meeting Date: \_\_\_\_\_

Committee Members Present: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

- § Approved
- § Approved with revisions as described
- § Not approved

Proposal Evaluation: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Additional Progress Evaluation:**

Language & Communication Requirements: \_\_\_\_\_  
\_\_\_\_\_

Advisor's Signature \_\_\_\_\_ Date \_\_\_\_\_

\*\*\* Attach proposal copy to this completed form and return to Graduate Staff Assistant, 302 Walker

## SCHEDULE DOCTORAL COMPREHENSIVE EXAMINATIONS

**\*\*You must be registered for the semester during which the exam is scheduled (including summers).**

**Student Name** \_\_\_\_\_ **Student #** \_\_\_\_\_

**Advisor** \_\_\_\_\_

### **DOCTORAL COMPREHENSIVE EXAM (written)**

(Date for each question)

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

With arrangements for questions to be picked up and returned as follows:

---

---

---

---

---

---

**DOCTORAL COMPREHENSIVE EXAM (oral)** on (date) \_\_\_\_\_

during the following hours \_\_\_\_\_ in room \_\_\_\_\_.

(Has your committee changed or remained the same? Be sure to complete committee form for Graduate Staff Assistant.)

**CHANGE OF DOCTORAL COMMITTEE**

Student Name \_\_\_\_\_ Student # \_\_\_\_\_

*\* Please include the Department for any member outside of the Geography Dept.*

Chairperson and Advisor: \_\_\_\_\_

Co-Chairperson (if necessary): \_\_\_\_\_

Major Members: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Outside Members: \_\_\_\_\_

\_\_\_\_\_

Minor Field Members: \_\_\_\_\_

\_\_\_\_\_

Special Members: \_\_\_\_\_

\_\_\_\_\_

**ADVISOR'S REPORT ON  
FIRST POST-COMPS DOCTORAL COMMITTEE MEETING**

Student Name: \_\_\_\_\_

Meeting Date (on or before Oct 15<sup>th</sup>) : \_\_\_\_\_

Committee Members Present: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

If any committee members were not physically present, please specify:

\_\_\_\_\_

§ Approved Progress

§ Not approved

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Advisor's Signature** \_\_\_\_\_ **Date** \_\_\_\_\_

\*\*Return to Graduate Staff Assistant, 302 Walker, by Oct. 15<sup>th</sup>.

**ADVISOR'S REPORT ON  
SECOND POST-COMPS DOCTORAL COMMITTEE MEETING**

Student Name: \_\_\_\_\_

Meeting Date (on or before Oct 15<sup>th</sup>) : \_\_\_\_\_

Committee Members Present: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

If any committee members were not physically present, please specify:

\_\_\_\_\_

§ Approved Progress

§ Not approved

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Advisor's Signature** \_\_\_\_\_ **Date** \_\_\_\_\_

\*\*Return to Graduate Staff Assistant, 302 Walker, by Oct. 15<sup>th</sup>.

**SCHEDULE DOCTORAL DEFENSE EXAMINATION**

**\*\*You must be registered for the semester during which the exam is scheduled (including summers).**

Student Name \_\_\_\_\_ Student # \_\_\_\_\_

Advisor \_\_\_\_\_

Title of Dissertation

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**DOCTORAL DEFENSE** on (date) \_\_\_\_\_

during the following hours \_\_\_\_\_ in room \_\_\_\_\_.

(Has your committee changed or remained the same? Be sure to complete committee form for Graduate Staff Assistant.)

## **GEOGRAPHY GRADUATE MINOR**

A minor is a formal credential that appears on a graduate student's transcript. The Geography Graduate Minor is for Penn State graduate students enrolled in programs other than Geography. For example, PhD students in Communications Arts and Sciences may seek to earn a Geography Minor, and both credentials would be reflected on the student's final Penn State transcript and diploma. The requirements for award of a Geography Graduate Minor are:

**PhD, 15 credits total:**

- (1) 6 credits: two 500-level Geography seminars
- (2) 9 credits: Geography courses at 400, 500, and 800 levels, with no more than six credits at the 400 level and no more than six credits of GEOG 596 (independent study)
- (3) At least one tenured/tenure-track Geography faculty member must be on the candidate's doctoral committee

**Master's, 9 credits total:**

- (1) 6 credits: two 500-level Geography seminars
- (2) 3 credits: One Geography course at 400, 500, or 800 level