Atmospheric Sciences

GRADUATE HANDBOOK 2017-2018

Department of Geography
The Ohio State University
Morton O'Kelly, Department Chair
Steven Quiring, Graduate Studies Chair

1. QUICK REFERENCE

A. Graduate School Deadlines: Graduation, Candidacy, Final Exams

Applications to Graduate are due by the third Friday of each semester (use <u>GradForms</u>). Autumn: September 8, 2017; Spring: January 26, 2018

Applications for Candidacy Exam must be *approved* by the advisor and GPC at least two weeks before the oral date (use GradForms).

Applications for Doctoral Final Exams (defense) must be *approved* by the advisor, committee members, and GPC at least two weeks before the defense date (use <u>GradForms</u>). You must submit a complete draft of the dissertation to your full committee and the Graduate School prior to this date; see the <u>Final Oral Exam</u> in the Graduate School's Graduate Handbook.

B. Departmental Deadlines

Name your advisor by the end of Autumn semester

Name your committee members by the end of February

Graduate Spring Review Form and Portfolio due January 31

<u>Presidential Fellowship internal pre-application</u> is due the second Friday of each semester <u>Autumn</u>: September 1, 2017; <u>Spring</u> January 19, 2018

C. Minimum Registration Requirements

	Autumn/Spring Semesters	Summer
Funded MA and Pre-candidacy PhD	8 hours	4 hours
Fellowship/Trainees	12 hours	6 hours
Post-candidacy PhD (whether funded or not)	3 hours	3 hours
Veterans	6 hours	4 hours

See Course Load in the <u>Graduate School Handbook</u> and in <u>this handbook</u>. See also <u>registration</u> <u>requirements</u> for funded students in this handbook.

D. External Resources

Graduate School Handbook

Department of Geography website

Table of Contents

1.	QUI	ICK REFERENCE	2
	A.	Graduate School Deadlines: Graduation, Candidacy, Final Exams	2
	В.	Departmental Deadlines	2
	C.	Minimum Registration Requirements	2
	D.	External Resources	2
2.	GEC	OGRAPHY AND ATMOSPHERIC SCIENCES AT OSU	6
	A.	Aims of the Graduate Program	6
	В.	Graduate Studies Committee (GSC)	7
	C.	Graduate Studies Chair	7
	D.	Graduate Program Coordinator (GPC)	7
	E.	Geography Graduate Organization (GGO)	8
	F.	Department Chair	8
	G.	GradForms and Grad Central	9
3.	DEP	PARTMENTAL CULTURE	9
	A.	General Policies	9
	В.	Advising: Advisors and Committees	9
		❖ Choosing your advisor	9
		❖ Advising Best Practice	10
		Choosing your committee: guidelines	10
		Annual Committee Meetings	11
		❖ Letters of Recommendation	12
		Professionalism	13
		Authorship and Intellectual Independence	13
	C.	The Student and the Department	13
		❖ Teaching and Research Positions	13
		❖ Faculty Evaluation of Student Instruction	14
		❖ Other Professional Development	15
		Emotional Challenges: help for stress and anxiety	15
		❖ Social Events	16
	D.	"Good Standing" vs. "Good Progress" in Your Program	16

	E.	Rev	view of Student Progress	17
		*	Faculty Review of Student Progress	17
		*	Graduate Portfolio	17
	F.	Gri	evance Procedures	19
4.	ACA	DEM	IICS	20
	A.	Ger	neral Policies	20
		*	Time to Degree/funding limits	20
		*	Dual Degree Policy	20
		*	Plagiarism and Academic Misconduct	20
	В.	Cou	ursework	21
		*	Course Selection	21
		*	Courses outside the Department	21
		*	Course Load	21
	C.	Res	search	22
		*	Financial Support for Research	22
		*	The IRB	23
	D.	Cor	nference Presentations and Publications	23
	E.	The	Master's Program	24
		*	General guidelines	24
		*	Timely Completion of Degree	24
		*	Geography Master's Format: Thesis or Journal Article Option?	25
		*	Research Proposal	25
		*	Master's Examination	26
		*	Internal Application to the PhD program	27
	F.	The	e PhD Program	28
		*	General Guidelines	28
		*	Timely Completion of Degree	28
		*	Dissertation Proposal	29
		*	Candidacy Exam	29
		*	Dissertation	31
		*	Dissertation Defense/ Final Oral Examination	32
5	FINI	ΔΝΟΙ	AL SLIDDORT	3/1

	A.	Gra	duate Student Funding	34
		*	Responsibilities and Evaluation	34
		*	Registration Requirements	35
		*	Stipends	35
	B.	Fee	s	36
		*	Payment of Tuition and Fees	36
		*	Summer Session Tuition and Fee Waiver	36
		*	Other Tuition and Fee Waivers	36
		*	Other Fees	37
	C.	Ben	efits	37
		*	Health Insurance	37
		*	Retirement Programs	37
	D.	Pay	roll Deduction	38
		*	Direct Deposit	38
		*	View Pay Stub	38
	E.	Rea	ppointment and "Contracts"	38
	F.	Trav	vel and Research Support	39
		*	Departmental Support for Presenting at Conferences	39
		*	Departmental Awards for Outstanding Graduate Students	39
		*	University Awards for Outstanding Graduate Students	40
		*	The Presidential Fellowship	41
6.	Арре	endix	A. Geography MA & PhD Requirements	42
7.	Арре	endix	B. ASP MA & PhD Requirements	43

2. ATMOSPHERIC SCIENCES AT OSU

A. Aims of the Graduate Program

Our program is designed to train students in the theories, applications, and empirical questions central to the disciplines of Geography and Atmospheric Sciences. We seek to produce scholars and scientists of the highest quality. Graduate students are central to the Department's scholarly and scientific community; their research and teaching contributions are central to our mission.

Overall, these goals are reflected in the graduate program's broad programmatic commitments:

- To bring graduate students rapidly and fully into the collegial, scholarly, scientific, and teaching life of the department and University
- To provide a common foundation for graduate research in geography and atmospheric sciences
- To provide a variety of courses to meet student research and training needs, and to support student efforts to find relevant courses outside the department
- To offer opportunities for students to become familiar with current research within geography and atmospheric sciences
- To encourage students to engage with the academic culture of research presentation and critique
- To support as far as possible the financial needs of graduate students through a variety of teaching or research appointments and fellowships.

Our program is designed to develop outstanding thinkers and to lay the foundation for rewarding careers. OSU Geography/Atmospheric Sciences has a long history of preparing students for diverse jobs in academia/education, government, the private sector, and non-profits. Master's graduates in particular have found that their intellectual and technical training in our department leads to fulfilling careers in multiple fields.

At the PhD level, we assume that the majority of our students will seek positions as academic geographers/atmospheric scientists in university settings. We recognize that not all students will find positions at research-intensive universities. We also appreciate that such positions do not always represent an ideal fit for some students' skills and interests. Indeed, our graduates have developed fulfilling careers within liberal arts colleges and other more teaching-intensive college settings (see the Graduate School's 'Preparing Future Faculty Program'). We recognize too that there are challenging careers outside of academia. Students' employment options will be discussed in the required graduate professionalization seminar and in other departmental forums. We also encourage students to take advantage of the wealth of university resources aimed at helping students explore their career options (for example, the Graduate School's 'Versatile PhD'). However, as scholars working in a research-intensive university, faculty

members are best positioned and most likely to train doctoral students towards positions in similar institutions.

B. Graduate Studies Committee (GSC)

The Department of Geography has two graduate programs: Geography and Atmospheric Sciences. Each program has its own Graduate Studies Chair, evaluates its applicants separately, and has distinct curricular expectations. In all other respects, however, the procedures and norms outlined in this Handbook apply to all of our graduate students, both in Geography and Atmospheric Sciences.

The Graduate Studies Committee is dedicated to advancing the aims of the Graduate Program for all graduate students. The committee is comprised of a chair, two other faculty members, and the graduate program coordinator.

The GSC serves several specific roles:

- To publish and regularly update this handbook
- To recruit students to the program
- To oversee the evaluation of all applications to the graduate program.
- To coordinate and oversee the orientation of new students to the department, including guidance for students who are likely to be teaching assistants during their graduate career
- To coordinate the process for supporting and evaluating student progress
- To nominate competitive students for university fellowships
- To coordinate necessary revisions to the graduate curriculum, and to coordinate with the various bodies on campus tasked with overseeing curricular issues
- To deal with petitions and other special requests made by graduate students

The GSC also handles various ad-hoc issues related to graduate students (governance, academics, awards) within and beyond the department.

C. Graduate Studies Chair

The Graduate Studies Chair is your point of contact for the GSC. The chair approves graduate programs and is the person graduate students should address with problems.

D. Graduate Program Coordinator (GPC)

The Graduate Program Coordinator is the primary administrative liaison between graduate students and the department and between the department and the Graduate School. In this capacity the GPC is tasked with updating students regularly regarding administrative deadlines, alerting students to upcoming events, and making announcements on behalf of faculty regarding graduate student progress. A large part of the GPC's job is to handle the day-to-day

flow of graduate applications and to compile and make that information available to the GSC and other faculty.

E. Geography Graduate Organization (GGO)

The GGO is the university-recognized organization for graduate students in geography and atmospheric sciences that serves the interests of the graduate student body; the organization strives to improve the experience of all graduate students. All graduate students in geography and atmospheric sciences are by default members of the GGO. The organization serves a number of important roles within the department and wider university community. Representatives from the GGO are elected each year to serve on all departmental committees to ensure that graduate student interests are taken into consideration in departmental decision making. The GGO also elects a representative(s) each year to serve on the Council of Graduate Students (CGS). The organization provides a forum for graduate students to voice concerns to the rest of the graduate student body and to discuss methods for addressing such concerns within the GGO leadership.

The GGO is also active in assisting with department functions, hosting events both for the department and wider university community, and organizing social events. Participation and meeting attendance is encouraged for all students in the geography department, and many opportunities are made available for all graduate students to become involved with specific tasks and activities throughout the academic year.

F. Department Chair

The Chair of the Department of Geography plays a crucial role in the graduate program, particularly in terms of setting the priorities for the GSC. The Chair reviews all GSC recommendations regarding all aspects of graduate program policy, and is responsible for final decisions. The Department Chair is also the ultimate department-level arbiter of any disputes or problems between and among faculty and graduate students.

G. GradForms and GradCentral

<u>GradForms</u> and <u>GradCentral</u> are two tools that you will use throughout your time at Ohio State.

GradForms is the application you will use to file most types of forms with the graduate school. You, the student, will initiate the form and it will go through the appropriate workflow process to be approved. You are responsible for checking the status of the form to ensure that it is approved by the appropriate deadline.

GradCentral is a tool to allow departments and students to track progress through a graduate program. You will be able to visualize your progress through program milestones as well as upload CVs, award notifications, and make notes on your progress.

3. DEPARTMENTAL CULTURE

A. General Policies

The department strives to create a vibrant intellectual environment that is conducive to the free exchange of ideas. Constructive and civil critique of others' ideas, teaching, and written work are an important part of healthy academic exchange. The everyday 'hallway' relationship between graduate students and faculty should be defined by professional collegiality.

Following <u>university policy</u>, the <u>department prohibits discrimination</u> against individuals on the basis of their age, ancestry, color, disability, gender identity or expression, genetic information, military status, national origin, race, religion, sex, sexual orientation, or veteran status.

Sexual misconduct and harassment is taken as seriously in the Department as it is elsewhere on campus. See the <u>University policy on sexual misconduct, sexual harassment, and relationship violence</u>.

B. Advising: Advisors and Committees

Choosing your advisor

The student-advisor relationship is at the heart of the graduate enterprise. Your advisor is your intellectual guide, advocate and professional model. Success in the graduate program therefore rests in large part on achieving a productive mentoring relationship with your advisor. Check the Graduate School Handbook section on Best Advising Practices for more details.

Things to consider when selecting an advisor:

- S/he must be a regular faculty member of the department; for PhD students the person must have Category P status
- S/he does not have to be your provisional mentor
- You must identify an advisor by the end of your first semester
 - Complete the Advisor program requirement in GradCentral
- You are free to change advisors at any time (except when graduating or taking candidacy)
- Co-advising is a viable option

To change your advisor:

- Consult with the GSC Chair
- Choose a new advisor within one month of formally alerting your former advisor of the change
- Update the GSC Chair and GPC

Note: The Graduate Program Coordinator keeps track of advisor and committee assignments via GradCentral. Notify the GPC if there is a change to keep your GradCentral page up-to-date.

Advising Best Practice

You should meet with your advisor at the start of every academic year to review the achievements of the previous year and to establish goals and expectations for the coming year.

In addition, you and your advisor are expected to meet at least once a semester. It is recommended that you keep your advisor informed of various elements of your professional life so that they can be an effective advocate for you.

Choosing your committee: guidelines

In addition to your advisor, other faculty members will form the committee(s) that helps to guide you through the program. Your committee members should have a demonstrated interest and/or expertise in some aspect of your research program. Ideally, you should choose faculty members with whom you have already taken a class, although this can be difficult given the time constraints on naming your committee. Make an effort to populate your committee with faculty who—based on your conversations with them—appear to be best able to help you with *your* project.

For all students:

- All students should form a committee by the end of February of their first year
- Number of committee members varies; see below
- Committees should be approved by the GSC chair
- Students must notify (via email) the GPC of committee membership
- You may change your committee at any point except for the semester you intend to graduate
- In the case of shared advising responsibility (i.e. co-advising), the two advisors must decide who will chair exams (candidacy or final)
- Non-graduate faculty members (e.g. faculty at other universities) may be appointed to
 the committee by approval of the graduate studies committee in the student's home
 program and by petition to the Graduate School (use <u>GradForms</u>). The outside faculty
 member does not count against the required number of committee members.

For Atmospheric Sciences Master's students:

- 2-3 faculty members
- At least 2 must be Atmospheric Sciences faculty; 1 may be outside ASP or department

For Geography Master's students:

• 3-4 faculty members

 At least 2 must be faculty in the Department of Geography; 1 may be outside the department

For Atmospheric Sciences PhD candidacy exam committees:

- 4-5 faculty members
- At least 3 must be ASP faculty

For Geography PhD candidacy exam committees:

- 4-5 faculty members
- At least 4 must be graduate faculty at OSU
- The majority must be faculty in the Department of Geography

For Atmospheric Sciences PhD dissertation committees:

- 3-5 faculty members
- At least 3 must be graduate faculty at OSU
- The majority must be ASP faculty

For Geography PhD dissertation committees:

- 3-5 faculty members
- At least 3 must be Category P graduate faculty at OSU
- The majority must be faculty in the Department of Geography

As the complexity of a committee grows, so too does the challenge of convening meetings and exams with that committee, as all members must be present for an exam to proceed (the Graduate School allows one member to appear via <u>video conferencing</u> and more than one by petition). We therefore encourage students to balance their desire for a 'dream committee' against the logistical challenges of meeting regularly and substantively with that committee.

Often, the composition of a student's pre-candidacy committee (sometimes referred to as the "Candidacy Exam Committee") differs slightly from that of the student's so-called "Dissertation Committee." This reflects the different pedagogic goals of each step, and can affect the faculty expertise drawn on at each phase. For example, at the pre-candidacy stage, it is common for students to draw exclusively on faculty within the Department. As they advance in their research post-candidacy, they may wish to replace one of those internal committee members with a member from outside the department or the University who is a recognized specialist in some aspect of the student's dissertation research. Communicate all changes in committee membership to the Graduate Program Coordinator in writing as soon as they are made.

Annual Committee Meetings

You are required to convene a committee meeting every year and enter the date in the notes section of your GradCentral profile. This meeting need not occur only in Spring Semester, but you should give your committee a chance to review your progress over the previous year and to plan your research program and course schedule. The <u>Graduate Portfolio</u> is meant to inform

these discussions. These non-evaluative meetings should be considered separately from other committee business (e.g., exams).

There are strong pedagogic benefits associated with committee meetings. Sitting down with all your committee members—even for just an hour—accomplishes several things that separate meetings with individual committee members cannot:

- Ensures that your progress is discussed jointly by the committee in a regular manner
- Avoids redundant and time-consuming separate meetings
- Ensures that all committee members are 'on the same page' regarding your goals and progress
- Clarifies differences of opinion between committee members regarding advice to you.
 These differences can be highly productive moments of intellectual debate. But they must be openly discussed in a group setting in order to minimize confusion and stress to you. It is the job of your advisor to mediate such differences professionally and in such a way as to maximize their intellectual benefit to you.

While it may not be possible or practical to convene all committee members (due to faculty sabbaticals, for example, or because external committee members are at foreign institutions), it is strongly recommended that every effort be made to do so. Department staff will also assist in setting up Skype connections and other means for distant committee members to be "present" at committee meetings (as they must be at all exams).

Letters of Recommendation

One of your advisor's and committee members' most time-consuming duties is to write letters of recommendation for you. It is likely that they will do so multiple times during your tenure in the Department (to support grant proposals, fellowships, job applications, and so on), and they will continue to do so for some years after you have graduated (in support of job applications or applications for advanced academic programs).

Faculty members understand that letter-writing is an important part of their job, as these letters play an extremely important role in your career. Nevertheless, there are times of the year when faculty can be swamped with letter-writing requests. Your responsibility, therefore, is to ensure that you make the process as straightforward and pleasant as possible for your advisor and committee. After all, a faculty member irritated by a letter request is less likely to write a compelling letter. This means observing the following:

- Give your letter-writers as much warning as possible regarding the due date; ask if they anticipate being away or otherwise unavailable prior to the due date.
- Furnish the complete details of the job or competition to which you are applying, and the complete name and details of the person or committee to whom the letter be addressed. If you cannot find this information, contact the source to get it.
- Where appropriate, offer the letter-writer a copy of the statement or proposal that you have written for the application.

• Provide letter-writers with an up-to-date copy of your c.v. to ensure that the details of their letter match your record.

Professionalism

For details of professional standards between faculty and students, please see the Graduate School's page on <u>Professional Standards</u>.

Any breach of professionalism by either party is unacceptable and must be addressed immediately; particularly those relating to <u>sexual harassment or discrimination</u>. Graduate students wondering how to proceed should bring the problem to the immediate attention of the GSC Chair or to the Department Chair. If neither seems appropriate, please contact the department Human Resources representation (Suzanne Mikos).

Authorship and Intellectual Independence

The goal of the advising relationship is to foster intellectual curiosity and the free and open exchange of ideas. Especially when a student's research endeavors are closely intertwined with those of their advisor, however, it can be difficult to trace 'ownership' of an idea back to one party. Similarly, it can be difficult to disentangle the contributions of each to a joint research effort, such as a manuscript intended for publication.

Issues of intellectual contribution and authorship should be discussed candidly with your advisor. Faculty hold different views on the relative roles of faculty and students in the authorship of work emanating from advised research. To avoid misunderstandings, it is **strongly recommended** that students ask their advisor to clearly lay out their authorship/attribution policies as early as possible in the mentoring relationship. If the policies appear unfair, students should consider working with a different advisor. Should this be impractical, students should bring their concerns to the GSC Chair and/or the Chair of the Department.

Similarly, you are encouraged to speak frankly with *any* research collaborators about attribution protocols early in the collaborative process. To help you think through these issues, be sure to read the <u>University's Research Data Policy</u>, which has a procedure on the handling of authorship disputes on page 4 and 5.

C. The Student and the Department

Teaching and Research Positions

One of the rewards and challenges of graduate school is the opportunity to contribute directly to the department's dual mission of teaching and research.

Effective work relationships (whether as a GTA, GRA, or GA) start with communication—shared objectives, clearly defined expectations, frequent contact, and periodic feedback. At a meeting before the semester begins, instructors/advisors and GRAs/GTAs should discuss the objectives

and content of the course/project and agree on responsibilities and division of labor. These understandings should be written down to form a sort of 'contract' of work. As the semester progresses, periodic meetings, e-mail, and feedback keep the lines of communication open. Frequent meetings provide an opportunity for you to develop teaching/research skills and to learn from the instructor/supervisor's experience.

<u>Teaching Assistants:</u> It is important to recognize that faculty (and student "full-teach" instructors) have different styles and expectations regarding teaching assistantships, and some courses require more work than others. Students can be frustrated by receiving the same pay for different amounts of work. For this reason, every effort will be made to consider these differences in making TA assignments.

All TAs are expected to go through orientation with the University Center for the Advancement of Teaching (UCAT). This is designed to orient future teaching assistants and instructors to the multitude of resources on campus that are designed to assist them in their teaching mission.

<u>Instructor positions</u>: GTAs are often asked to take on the primary instruction role for introductory and mid-level undergraduate courses. Because we recognize that teaching experience is essential for competing in the academic job market, the department will try to give post-candidacy PhD students the opportunity to teach a full course, although we cannot guarantee this opportunity. We also recognize that being an instructor requires a large time commitment, and so we will also try to limit these full-teach assignments for students who are not past candidacy.

Research positions: Faculty frequently hire research assistants or research associates to assist them with some aspect of their research, from literature reviews to transcription to data analysis. These are positions that should be approached with the same diligence and professionalism required of any position. As with teaching associateships, the best way to ensure a fair and productive research relationship is to lay out expectations in writing at the beginning of the appointment. Any breach or abuse of those expectations by either party should be brought to the attention of the GSC Chair or Department Chair immediately.

<u>Contracts and Reappointment:</u> Students can expect to receive contracts starting 2 months before the start of the term in which they will be appointed. Contracts can be for the academic year or a semester. Students on a one-semester appointment will be notified of whether or not they will be reappointed a month before the end of the semester. Students with a funding package will only be notified if there is some reason they will not be reappointed.

❖ Faculty Evaluation of Student Instruction

For many students, the experience of graduate school includes opportunities to teach, either as a TA or a "full-teach" instructor. Teaching experience builds varied, transferable skills, including (but not limited to) organization, public-speaking, curricular development, and general expertise in the field taught. It is therefore valuable professional preparation, whether you intend to continue in academia or not.

It goes without saying that teaching improves with practice, and with feedback from students. Your teaching can also benefit from the insights provided by an evaluation of your teaching materials and classroom practice by a faculty member. Such review can offer useful suggestions and support for your teaching mission. Moreover, the more familiar a faculty member is with your teaching, the better they can speak to your competencies in a letter of recommendation.

UCAT and other resources across the university offer support for teaching, and are recommended for those seeking top-notch resources on how to design a syllabus, get ideas for classroom activities, and other forms of generic pedagogic advice. The difference in having a faculty member from our department review your teaching is that they are more likely to be familiar with the challenges of delivering specific geography-related content, be more familiar with the students you are likely to be teaching, and have experience with other elements of the immediate teaching context.

For all of these reasons, we highly recommend that TAs who teach labs and full-teach instructors work with a faculty member of their choosing (not necessarily their advisor) to get feedback on their teaching. If you are interested in such feedback, consult with your advisor to set up a timeline and discuss strategic selection of a faculty member to conduct your teaching evaluation. You and your evaluator can determine the nature of the feedback (oral, written) that would be most useful to you. For example, students planning to continue in academia may find it useful to work with their evaluator to produce a written Statement of Teaching Evaluation that can be included in your teaching portfolio.

Other Professional Development

The Department offers multiple opportunities for professional development, including events such as poster sessions, brown-bag presentations, or events related to Geography Awareness Week and GIS Day. Particularly important is the Speaker Series, in which people from other institutions come to give presentations on their research. These are valuable opportunities to keep abreast of developments within and beyond the discipline, and they are important networking and service opportunities. *All graduate students are expected to participate in these events regularly and substantively* (with the understanding that conflicts may occasionally arise due to teaching and course commitments). Graduate student participation and organization are critical to the success of all such events.

It is also expected that graduate students attend events beyond the department. OSU is a huge university, and graduate students should take advantage of the myriad events ongoing at any time. News about events that are deemed particularly relevant to geographers and atmospheric scientists are typically relayed through the departmental listsery.

Emotional Challenges: help for stress and anxiety

Graduate school can be emotionally difficult for a whole range of reasons: balancing multiple roles and responsibilities, time management, the uncertain future, and so on. Sometimes the

process can be stressful and anxiety-inducing, and many students report that their transition to grad school is challenging and occasionally overwhelming. Often these anxieties peak during the dark and cold months of January, February, and March!

Feeling overwhelmed or anxious is not unusual and is not a sign of failure; help is available. If you feel this way, please discuss it with your advisor, who may be able to offer you some concrete suggestions to ease your stress. Your committee members, the GSC Chair, and other faculty can also be helpful. Also be aware of the many resources on campus designed to help students with time management and with the management of stress and anxiety, including the Student Advocacy Center at the Office of Student Life, and the Younkin Success Center, which offers free and confidential Counseling and Consultation Services, and support through UCAT and the Dennis Learning Center. OUAB Grad/Prof also provides support and special events for grad students and their families.

Social Events

The GGO and Department organize a variety of social events throughout the year such as the coffee hours, picnics, a holiday party, and the end of the year award/graduation reception. All graduate students are expected to attend these events.

D. "Good Standing" vs. "Good Progress" in Your Program

According to the Graduate School, a student is considered to be in "good standing" if they maintain a GPA above a 3.0 and "make reasonable progress" toward his/her program requirements.

The Department of Geography sets a higher standard that clearly distinguishes "good standing" from "good progress." "Good progress" recognizes excellent academic progress as well as active engagement in other aspects of the department's mission. Students are making "good progress" through the Geography/ASP program when they:

- Make timely progress through the basic 'milestones' of their program
 - These include but are not limited to identifying an advisor, assembling a committee, writing a research proposal, completing candidacy, submitting drafts of written work to advisor/committee, and defending the thesis
- Perform GTA, GRA, or instructor responsibilities professionally
- Meet regularly with their advisor and committee
- Apply for research funding or other support (as appropriate)
- Present and publish their research (as appropriate)
- Participate fully in the life of the department, e.g. attending talks and social events
- Maintain good grades
 - ➤ Within our graduate programs, 'good' means the regular achievement of 'A.' In effect, grades only become an important indicator of student progress when they are consistently below the 'A' standard expected of all graduate students.

E. Review of Student Progress

Faculty Review of Student Progress

To provide substantive support and guidance to all of our students, student progress will be reviewed on an annual basis. The graduate student review process should be considered an annual cycle of professional development, intended to provide continuous planning and evaluation to culminate in graduation. In the Autumn, you meet with your advisor to plan activities for the year. In the Spring, you meet with your advisor, and ideally your committee, to follows up on the general expectations and personal goals from the fall to ensure that you are making good progress toward your degree.

The Spring Review phase includes an evaluation by the entire faculty of all students during an annual faculty meeting dedicated to that purpose. The process mimics the performance evaluation process found in most workplaces, including tenure-track positions at universities.

The annual spring review does not involve faculty voting on student progress. Rather, it gives all faculty who have had meaningful interactions with that student an opportunity to offer their comments on how the student is doing in the program, according to the criteria for "good progress" outlined above. This process helps to build a culture in which all faculty are familiar with all students in the program—personally and professionally—and thus more able to support their progress. The review is based on your graduate portfolio, which is discussed below.

As an outcome of that meeting, you will receive a written letter from the GSC Chair containing constructive feedback on your progress, including specific guidelines for areas of improvement as necessary.

Students who are not considered to be making "good progress" will be so informed in the letter from the GSC chair. A plan for performance improvement will be outlined, and the student will have one semester to meet the goals for improvement. If the student fails to meet those goals, s/he may lose departmental funding support and/or may be denied further registration in the graduate program. See section <u>5.4</u> and <u>5.5</u> of the Graduate School Handbook for more information on denial of registration.

Graduate Portfolio

Each spring, students will fill out an online <u>Graduate Spring Review Form</u> and assemble a Graduate Portfolio that will summarize their academic and professional accomplishments to date. Help in assembling this portfolio can be sought from your advisor or the GSC Chair. The core of the portfolio is a complete and up-to-date **curriculum vita**. Also included in the portfolio are statements on research, teaching, and professional development, which you should tailor to your needs.

The portfolio should be used as the basis for discussion of the student's progress at the student's spring meeting with their advisor (and ideally, their committee), and will provide the

basis for discussion of student progress at the faculty's annual Spring Review of student progress meeting.

Students graduating in the spring may choose to turn in only an updated CV.

You will submit your Graduate Portfolio in GradCentral and fill out the online Graduate Spring Review Form, in which you provide basic information about your program of study. You should upload the individual documents of your portfolio to the Spring Review program requirement in GradCentral near the beginning of spring semester.

The Graduate Portfolio you submit for the Annual Review must include the following sections, in this order:

- 1. Up-to-date *Curriculum Vitae (CV)* (the UC Berkeley Career Center has <u>templates and ideas</u>). Be sure to include the following in your CV (not necessarily in this order):
 - Educational background/ higher education degrees
 - Professional positions (i.e. previous and current jobs)
 - Brief statement of research interests and/or list of areas of expertise
 - Fellowship and research grant proposals submitted (if not funded)
 - Fellowships and research grants funded
 - Publications (indicated whether peer-reviewed)
 - Conference presentations (indicate whether peer-reviewed, whether a talk or a poster and, if multi-authored, who was the presenter)
 - Any other items broadly considered as research experiences/products (e.g. awards, training workshops, fieldwork)
 - Courses for which you were the teaching assistant (course number, name, semesters)
 - Courses for which you were the instructor (course number, name, semesters)
 - Teaching awards and recognitions
 - Guest lectures
 - Professional development related to teaching (e.g. UCAT workshops)
 - Service to the department, university, and discipline, e.g. committees, reviews, hosting departmental guests, conference session organization (break this into separate sections as the list gets long)
 - Training workshops
 - Anything else of relevance: make note of ALL of your activities
- 2. If not in the CV, include a list of grants and fellowships to which you applied but that were not funded. Even if unsuccessful, this demonstrates important effort.
- 3. Description of research interests and statement of research philosophy*
- 4. Description of teaching experience and statement of teaching philosophy*
- 5. Description of professional development, broadly defined*

^{*} The style, length, and content of the research, teaching, and professional development statements should be tailored to the experiences and career goals of the individual students.

F. Grievance Procedures

We understand that problems do arise. When this happens, a discussion with the GSC Chair may be enough to resolve the issue. While we do have formal grievance procedures, please always start by meeting the GSC Chair. If your issue is still not resolved, then use the following procedures.

The following are formal procedures for reporting and resolving grievances by graduate students in the Department of Geography.

- 1. Student must first bring the grievance to the attention of the Graduate Studies Committee Chair in writing. The written grievance should include:
 - a. Student name
 - b. Department
 - c. Position (if any; GRA, GTA)
 - d. Faculty Advisor
 - e. Statement of Grievance
 - f. Relief Requested
- 2. The Graduate Studies Committee Chair and the HR officer review evidence to determine that a valid grievance exists. A representative from the GGO may be present at the request of the student.
- 3. Graduate Studies Committee Chair, GGO representative meet with the Department Chair to review if evidence of a grievance exists and, if so, how it may be resolved.
- 4. All of the above steps must be documented in writing and included in the student's academic file. The student will be provided a copy of the documentation as well.

See also the Graduate School's grievance procedures.

4. ACADEMICS

A. General Policies

Time to Degree/funding limits

Our programs are designed so that master's students graduate within two years, and doctoral students within four years. The Department will not fund a third year for a master's student and it cannot guarantee funding to PhD students beyond their fourth year; students in this position should be prepared to compete for external funding sources if a fifth year is required. (For more information, see the <u>funding section of this handbook.</u>) The <u>annual review process</u> will allow students in this situation to be identified early. For example, the pursuit of external funding for dissertation research can itself prolong the time to degree; applications take time and funding opportunities often come with expectations for additional work (language or other classes, fieldwork, and so on). The annual review will ensure that the Department Chair, fiscal officer, and GSC are familiar with such cases so they can try to accommodate those students in funding decisions.

It is also understood that personal and professional issues may arise that extend the time a student may require in their program. If you expect your progress to vary significantly from the norm, the onus is on you (in close consultation with your advisor) to plan ahead and/or account for any variations or delays. For example, you may be eligible for family/medical <u>leave of absence</u>, including <u>leave from the continuous enrollment policy for post-candidacy PhD students</u>.

Specific time limits on graduation and other issues regarding timely completion of degree are described further under the specifics of the <u>master's</u> and <u>PhD</u> programs.

Dual Degree Policy

In certain circumstances, graduate students may benefit by pursuing another degree outside the department during their graduate studies in Geography. For instance, in the past, Geography PhD students have successfully obtained Master's in Applied Statistics and Master's in Applied Economics.

Students seeking a degree in another department must formally apply to the Graduate Studies Committee as soon as possible once they enter the graduate program, and no later than one year prior to graduation. This application will consist of a one-page statement of justification/need, a detailed program of study outlining how they will satisfy all program requirements for both degrees, and a statement from the advisor. Students must acknowledge that their top priority remains the Geography degree. Interested students also need to consult the Graduate School's Dual Degree Plan Approval Form (on <u>GradForms</u>).

Plagiarism and Academic Misconduct

The Ohio State University and the Department of Geography take any form of academic misconduct very seriously. The Department of Geography will enforce all University policies regarding academic misconduct. As a student and a teaching assistant, you are expected to be aware of these policies:

- The <u>Graduate Student Code of Research and Scholarly Conduct</u>, which describes the Graduate School's general expectations for ethics and conduct in graduate research and scholarship.
- Research and Scholarly Misconduct. As a recipient of federal funding, the university is
 obligated to have an administrative process for reviewing, investigating, and reporting
 allegations of research misconduct. The <u>University Policy and Procedures Concerning Research</u>
 Misconduct is available on the Office of Research Compliance website.
- Academic Misconduct. The university's <u>Committee on Academic Misconduct</u> is responsible for reviewing charges of academic misconduct against students, including graduate students. The <u>Code of Student Conduct</u> defines the expectations of students in the area of academic honesty.

B. Coursework

Course Selection

Course requirements are designed to prepare students for professional careers as geographers, ensure that students are exposed to the breadth of inquiry in Geography, and ensure students are trained in appropriate methodologies and methods. The curriculum for all programs is quite flexible. The minimum requirements provide a shared foundation, while students then choose additional elective courses tailored to their specific needs.

Students often enroll in **independent study (5193 or 7193)** or **dissertation research (8999)** courses. These courses can be used for a variety of purposes including directed readings (with your advisor or another faculty member), proposal writing, fieldwork and other data collection, data analysis, thesis writing, and manuscript writing. The content and style of these courses are determined between the instructor and the student. The GPC will need to register you for these hours with the approval of your advisor. In order to get registered, fill out the <u>Independent Study form</u>.

For specific course requirements by programs, see <u>Appendix A (Geography MA and PhD)</u> or <u>Appendix B (ASP MA and PhD)</u>.

See also Course Credit in the Graduate School Handbook.

Courses outside the Department

As long as a student is meeting the requirements of their program and their advisor approves, students are encouraged to seek relevant courses outside the department and/or College.

Note: Registration for classes outside of Geography or ASP must not conflict with a Departmental teaching assignment.

Course Load

The <u>minimum number of credits</u> for which you must register in a given term varies based on whether or not you are funded, what type of funding you receive, and whether or not you are post-candidacy.

	Autumn/Spring Semesters	Summer
MA and Pre-candidacy PhD (GA funding)	8 hours	4 hours
Fellowship/Trainees	12 hours	6 hours
Post-candidacy PhD	3 hours	3 hours
Veterans	6 hours	4 hours

Students typically enroll in more coursework at the beginning of their studies, moving to more independent study credit as they focus increasingly on their own research. Both courses and independent study credits count toward the required minimums.

The required number of credits pertains to *graduate* credits (i.e., classes at the 5000 level and above). **Enrollment in undergraduate credits fails to meet the Graduate School and Departmental minimum requirements**.

Registering for the minimum number of graduate credit hours may not satisfy program requirements.

Any post-candidacy student who enrolled in the OSU Graduate School after Autumn 2008 or who has been un-enrolled for more than two years must maintain <u>continuous enrollment</u> until graduation.

C. Research

The core endeavor within the graduate program is the conduct of research. At the master's level, a minimum requirement is that students demonstrate their capacity to conduct research, including the identification of a research problem, the design and execution of a research approach, and the analysis and write-up of that research. At the doctoral level, the minimum requirement is that students harness their demonstrated capacity for research to a problem that results in the production of new knowledge. For information on the research proposal and public defenses, see guidelines in the MA and PhD sections of this handbook.

❖ Financial Support for Research

No matter what type of research you intend to do, it is highly recommended that you pursue opportunities to have others help to pay for it. Various sources offer research grants. Some are offered through the University (so-called "internal" funding); others require applying to regional, national, or international organizations or governments ("external" funding). At the PhD level, research funding opportunities grow in size and prestige. These include the DDRI (Doctoral Dissertation Research Improvement) competition of the National Science Foundation, and Fulbright's doctoral fellowships.

Each source typically requires tailoring your research proposal to particular funder requirements, and often request a cv, cover letter, and letters of recommendation. Work with your advisor from the beginning of your first year to identify those sources of funding for which you are most likely to be competitive. Many grant application deadlines fall between October and February, and putting

together a competitive application takes time. You should therefore begin this process as early as possible, and to work closely with your advisor to revise drafts of your application.

The Graduate School maintains a database of external funding sources.

❖ The IRB

Like all universities, OSU has an "Institutional Review Board," or IRB, that is designed to ensure that researchers (be they undergrads, grads, or faculty) who work with human subjects in no way harm them or put them at undue risk. If you plan to work with human subjects, your proposed research must be approved by the IRB.

Getting this approval takes time. At a minimum, it requires that you: a) take an on-line course to learn about ethical research (this takes about 3 hours), and b) that you fill out a "Request for Exemption" or other form. Depending on the research, you may not qualify for exemption, and may need to fill out a full application. Based on the experience of other students, expect to spend at least a week (more in the case of international research) filling out these forms and following up with any more information that the IRB requires. Also, you'll need to begin this process at least two months before you intend to do the actual work, since the IRB meets infrequently and it is likely you will have to revise your application. Talk to other students who have done IRBs to get their advice (and, ideally, ask to see copies of successful applications). Your advisor will also be able to help you navigate this process as efficiently as possible.

D. Conference Presentations and Publications

An essential component of professional life is regular attendance and presentation at conferences, including local, regional, national, and international conferences. Attendance of the annual AAG and/or AGU meetings are vital for PhD students, both as an opportunity to present your work and as an important way to build your professional network. See the <u>policy regarding financial support for conference travel</u>.

Publishing your work is valuable to all students, regardless of your future career plans. All students should pursue publication; doctoral students are expected to do so. Initial publications are often co-authored with an advisor; PhD students, however, are expected to publish as first or single authors. Master's theses and research papers are common sources of publications, as are research papers written for courses.

Students wishing to publish from their theses or dissertations may consider requesting that the Graduate School delay (by up to 5 years) the on-line dissemination of the document until the work is published in article or other format. The Graduate School has a petition to delay dissemination of Ohio State dissertations and theses, available on <u>GradForms</u>.

It is important to develop a habit of writing for publication. In addition to research papers and theses, other aspects of your graduate experience can serve as writing fodder, including pedagogic innovations or your experience of graduate school itself. Correspondingly, there are multiple formats in which to be published. For example, many students 'break into' writing for academic journals with

book reviews. They may then submit a research brief/report, a commentary, or a literature review before attempting a full-blown research piece.

E. The Master's Program

General guidelines

Our master's degree program is designed to have you demonstrate that you are capable of identifying a research problem. In addition, you need to be able to marshal the conceptual and methodological tools to adequately address it.

The Graduate School outlines the <u>rules</u>, <u>regulations</u> and <u>norms for all master's degrees</u>.

These rules stipulate <u>minimum credit requirements</u>: the MA/MS degree requires a minimum of 30 graduate credit units; at least 80% of these must be taken at OSU, over at least two semesters.

The Graduate School also provides a <u>Summary of Master's Degree Graduate Requirements</u> and a checklist of <u>Final Semester Procedures-Master's</u>.

What follows relates to specifics of our program, which may in some cases differ from those of the Graduate School (and are so noted). See above for guidelines regarding the <u>Master's committee in Geography</u>. See <u>Appendix A (Geography)</u> and <u>Appendix B (ASP)</u> for a list of required courses.

Timely Completion of Degree

You should graduate by the end of your second year in the master's program. Should obstacles arise that prevent you from doing so, it is possible to extend a master's program up to the end of your fourth complete academic year (though the department does not offer funding beyond the second year). If you do not graduate after your fourth year then you will be expelled from the program. This is a departmental rule, not a Graduate School rule.

In order to graduate within two years, the following sequence and timing of key programmatic goals is recommended.

YEAR 1

Fall Plan coursework with (interim) advisor

Identify an advisor by the end of classes in Autumn semester

Spring Form committee by the end of February

Present proposal

Apply for research grants (as necessary)

Meet in spring with advisor (and ideally committee)

Prepare portfolio

Summer Research

YEAR 2

Fall Research (continued) & Analysis

Recommended: Report to committee on summer progress

Apply to PhD programs (if interested)

Spring Analysis (continued)

Write thesis/paper

Spring meeting with advisor (and ideally committee)

Defend thesis/ Take master's exam (depending on Plan A or B)

GRADUATE

Geography Master's Format: Thesis or Journal Article Option?

Students must choose between one of two approaches to the master's program. Formally known as Plan 'A' or Plan 'B,' a useful way of thinking about the distinction is that 'Plan A' results in a master's thesis, and 'Plan B' results in a research paper typically designed to be published as a journal article. For geography students, the primary difference between them is that Plan A results in a thesis that is defended during the oral exam; Plan B results in a research paper with a separate master's examination comprised of a written and oral component. The decision to pursue one Plan or the other is typically made by the advisor and student at the beginning of the mentoring relationship.

ASP Master's Format: Thesis and Exam ASP students always follow Plan A, but they also take a written exam and an oral exam, at which the thesis is defended **and** exam questions discussed.

	Geography	Atmospheric Science
Plan A	 write thesis defend thesis in oral exam 	 write thesis take written exam defend thesis & answer questions on written answers in oral exam
Plan B	 write research paper take written exam answer questions on written answers in oral exam 	Not an option

Research Proposal

Most master's students will write a research proposal. At the master's level, a proposal is most essential if you are interested in seeking non-Departmental support for your research. Proposals demand a particular form of writing that requires practice. There are many different proposal formats. Your advisor will orient you toward the norms within your sub-field. Often, your best guides are the proposals of successful students who have preceded you in the program. Our graduates

report that proposal-writing is among the most important skills gained in graduate school, and it is a skill portable to multiple career paths.

Master's Examination

Students planning to graduate in a given semester must file an **Application to Graduate - Master's Degree** form via <u>GradForms</u> with the Graduate School no later than the third Friday of the term in which graduation is expected. It is in your best interest to complete the form as soon as possible. The signature of your advisor and the Chair of the Graduate Studies Committee on that form certifies that departmental core course requirements have been met.

Master's exams must follow these guidelines:

- The oral exam must be at least one week after acceptance of the document (exam or thesis) by the student's committee
- It is the advisor's responsibility to set the date and time of the examination and to inform all members of the student's committee
- At the conclusion of the exam, three actions are taken by the student's committee:
 - The committee decides whether or not the candidate passes the examination (the decision must be unanimous).
 - The committee decides whether the Master's thesis (of a Plan A student) is satisfactory.
 - Appropriate forms are filled out on GradForms and the results of the committee's decisions are discussed with the student.

A student is deemed to have successfully passed the exam if they are able to answer the questions posed to them thoughtfully and thoroughly. Their oral responses should make specific reference to concepts gleaned from coursework and independent research. It is particularly welcome if students can articulate the bounds of their knowledge with reference both to what they know and what they do not know.

For graduation to occur in the same term as the exam, the results of the exam must be satisfactory, and they must be certified to the Dean of the Graduate School no later than two weeks before commencement.

Other specifics of the master's examination depend on the student's program.

For **geography** students pursuing **Plan A**, the "master's examination" has only an oral component: the so-called "thesis defense." The exam is two hours and usually begins with a public presentation lasting not longer than 30 minutes (20 minutes for the presentation; 10 minutes for questions). The presentation must be announced publicly by the Graduate Program Coordinator so please send the date, time, title, and an abstract for your presentation to the GPC at least one week ahead of time. Committee members then take turns asking the student a series of questions related to the research in the context of the student's academic program.

For **geography** students pursuing **Plan B**, the "master's examination" has an oral **and** written component. For the written exam, generally each member of the committee provides 1-2 questions; these are compiled by the advisor and presented to the student to be answered over one week. The questions should not require that the student read new material. Questions focus on testing the student's grasp of a major body of work introduced in a course, or on some aspect of the research paper. The student answers each question in a separate essay, each usually 8-15 pages long. All answers are submitted together at the end of the week. The oral portion of the examination then focuses on the student's exam responses, but may also involve discussion of the research paper. Like the Plan A oral exam, it is two hours long and may begin with a brief presentation by the student. The presentation must be announced publicly by the Graduate Program Coordinator so please send the date, time, title, and an abstract for your presentation to the GPC at least one week ahead of time.

ASP students (all **Plan A**) typically take a four-hour written exam, answering four questions posed by their committee members. This is followed about a week later by the two-hour oral exam, as described above, focusing on the student's answers and on their Plan A thesis.

Variations from the typical exam format do occur, and ultimately are determined by discussions between the student, advisor, and committee members.

Internal Application to the PhD program

Master's students interested in pursuing a PhD in the department must formally apply to the PhD program. The application process is *internal* in that it does not go through the Graduate School. This means that no new GREs need to be taken and no new application fees paid. However, your application will be compared to all other incoming applications in the pool.

The policy applies to all current master's students, including those whose letters of acceptance into the master's program suggest simultaneous admission to the PhD program.

<u>The application process</u>. The process is *formal* in the sense that all of the following documents will be asked for (consistent with what is asked of external applicants): a statement of purpose (describing your research interests and academic direction); three letters of recommendation, a CV, and degree advising reports from OSU (in lieu of transcripts). Documents should be given to the Graduate Program Coordinator (Caitlin Naber) in conjunction with the application deadlines set for external applications.

Keep in mind:

- Applicants must have earned their master's degree no later than their second summer in the Department (e.g., by end of Summer 2017 for students who started their master's degree in Fall 2015);
- The statement of purpose should be no longer than two pages (maximum of 1200 words) in length. This should be written for a broad audience, spelling out the applicant's past and future research interests, and including any relevant background information. We expect PhD applicants to provide a detailed outline of their research trajectory and their anticipated research project;

 The statement of purpose should name up to two mentors. These may or may not be the applicant's current advisor(s).

<u>Deadlines</u>. Complete applications are due by **December 15** in the year before admission to the PhD program is sought.

<u>Graduate selection process and timeline</u>. The completed application will be considered alongside all other applications received for the PhD program. <u>All</u> files will be evaluated according to the same criteria, including academic excellence and fit with the department. The GSC, in consultation with the faculty as a whole, typically completes its decisions on graduate admissions by mid-February. We strive to make this process as rigorous as possible, and applicants should be aware that their file will be thoroughly and thoughtfully reviewed by multiple faculty members.

F. The PhD Program

General Guidelines

The purpose of a PhD program is to train students to become broadly knowledgeable about the field of Geography/Atmospheric Sciences and a specialist in a particular subfield, while creating new knowledge that is rigorously grounded in a robust and appropriate empirical and theoretical context.

The Graduate School outlines the <u>rules</u>, <u>regulations</u> and <u>norms for all doctoral degrees</u>.

These rules stipulate <u>minimum credit requirements</u>: the PhD degree requires a minimum of 80 graduate credit hours, or at least 50 credit hours beyond the Masters; at least 24 of these must be taken at OSU, over at least two consecutive semesters, and at least six must be completed after admission to candidacy.

The Graduate School also provides a <u>Summary of PhD Degree Graduate Requirements</u> and a checklist of <u>Final Semester Procedures</u>, <u>Doctoral</u>.

What follows relates to specifics of our program, which may in some cases differ from those of the Graduate School (and are so noted). See above for guidelines regarding the PhD committee in Geography. See Appendix B (ASP) for course requirements.

Timely Completion of Degree

The PhD should be completed in <u>four complete academic years</u>, though we recognize there may be variation depending on the program and the type of research (though the department makes no commitment to fund students beyond the fourth year). Students are expected to submit a <u>dissertation proposal</u> and complete the <u>candidacy exam</u> within their <u>first two years</u>. The department is committed to providing a supportive intellectual and curricular environment to help students move through the program at a steady pace toward graduation within four years.

In rare cases, extra time may be required to complete your PhD in Geography or Atmospheric Sciences. You will have a <u>maximum of nine years</u> from entry to the program to the submission of the final copy of the PhD dissertation to the Graduate School. **The candidacy examination must be taken**

by the <u>end of your third year</u> in the PhD program or you will forfeit any potential funding offer for your fourth year. Also, a failure to complete your candidacy examination <u>within four years</u> from your entry in the PhD program will result in expulsion from the program. These are department policies.

The final copy of the dissertation must be submitted to the Graduate School within five years of admission to candidacy or your candidacy will be canceled; this is a Graduate School policy.

Dissertation Proposal

The length and format of the dissertation proposal is to be decided by the student, advisor, and committee members. Many PhD students submit a proposal written for external funding (e.g. the NSF DDRI) as their departmental dissertation proposal.

Dissertation proposals are due to the committee at least one week prior to the Candidacy Examination, and more time is better. This timing serves three purposes.

- It provides some indication of the student's overall competence to pursue the independent research required for the doctoral dissertation.
- Committee members can review the proposal in time to get an idea of the sub-fields of the discipline to which the student aspires to contribute and thus on which the candidacy exam might focus. For both ASP and Geography students, discussion of the proposal is commonly covered as part of the candidacy exam. Yet it is important to note that the proposal and the candidacy exams serve two very different purposes: the exam assesses your scholarly competence as a geographer/atmospheric scientist, while the proposal addresses your dissertation plans.
- It ensures that once students are post-candidacy they are ready to begin to conduct the proposed research.

The proposal should be submitted for approval to the graduate advisor and to other members of the student's committee and should ideally form the basis of substantive discussion about the student's research trajectory in the Spring meeting between the student and their advisor/committee during the student's second year in the PhD program.

Proposals demand a particular form of writing that requires practice. There are many different proposal formats. Your advisor will orient you toward the norms within your sub-field. Often, your best guides are the proposals of successful students who have preceded you in the program. Our graduates report that proposal- writing is among the most important skills gained in graduate school, and it is a skill portable to multiple career paths.

Candidacy Exam

Admission to candidacy is arguably the most important step in the PhD program; see <u>sections 7.4-7.8</u> <u>of the Graduate School Handbook</u>. Below we lay out candidacy expectations in our department.

The purpose of the Candidacy Examination is to ensure that you as a doctoral candidate possess:

• competency in the subject matter of your area of specialization

- a working knowledge of the appropriate bodies of theory and methodology
- an acquaintance with geographic and/or atmospheric sciences literature and journals
- the ability to express facts and ideas clearly and effectively in both spoken and written English
- an overall competence to pursue the independent research required for the dissertation.

Timing:

- Generally taken at the end of the second year
- If not taken by the end of the third year, funding for fourth year is lost
- If not taken by the end of the fourth year, you will be expelled from the program
- You must be registered for 8 credit hours in semester of your exams
- You must be in good standing
- You must apply for candidacy at least 2 weeks before the oral date via GradForms

See above for guidelines on the **Candidacy Exam committee**.

Content and format:

There are two portions of the Candidacy Exam, the written portion and the oral portion. Your committee will prepare the written portion of the examination and administer the oral portion of the examination. It is recommended that procedures be followed to ensure that both you and your committee have a clear idea of admissible areas of questioning. Such procedures might include the preparation of reading lists by examiners, a meeting to lay out which committee members will ask questions on which body of literature, and so on. It is intended that, **on the initiative of the student**, continuous consultation with all committee members should take place to ensure that examiners and examinee share a common view of the scope and format of the Candidacy Examination. This is ideally done in the context of a committee meeting.

<u>Written</u>: Your committee has the responsibility to specify the precise format and timing of the written portion of the examination. Once the format and date for the examination are determined by the committee, the advisor will provide this information in writing to the Graduate Program Coordinator and Chair of the Graduate Studies Committee.

The written examination may be administered in one day or during a period not to exceed ten working days. Within both geography and atmospheric sciences there is considerable variation in the practice of candidacy exams, particularly with respect to the amount of time students are given to answer the committee's questions. It is therefore strongly recommended that students begin to discuss the specifics of the candidacy exam with their advisor and committee early in their second year, and that expectations be clearly established months in advance of the exam.

At the end of the allotted examination period, the student distributes copies of their answers to the committee for evaluation. If, based upon an evaluation of the written portion and discussion amongst themselves, the committee members see no possibility of a satisfactory overall performance in the Candidacy Examination; such a decision will be conveyed to the student, who may then waive their right to take the oral component. The committee cannot, however, deny the student the opportunity to take the oral.

<u>Oral:</u> The oral portion of the exam takes two hours. It starts with a public presentation of your proposal; the presentation must be no more than 30 minutes total (15-20 minute talk, 5-10 minutes of questions). The presentation must be announced publicly by the Graduate Program Coordinator so please send the date, time, title, and an abstract for your presentation to the GPC at least one week ahead of time. You will then attach the flyer the GPC generates to the proposal requirement in GradCentral in order to complete it.

For the rest of the exam, Graduate School regulations limit attendance to the student and members of their committee only. No other persons are to be present during the exam.

The candidate is asked questions about their written responses by all committee members in turn. The exam may also include discussion of the candidate's proposal, but this must be done in addition to, not in place of, discussion of the exam questions.

Following the oral examination, the student's advisor and committee must submit the Report on Candidacy form via GradForms. The decision of the examining committee on both the written and oral examination must be unanimous.

If for any reason a failure is recorded, or if the student waives their right to take the oral, the student is permitted to take a second examination if the committee recommends this course of action. The nature of the second Candidacy Examination shall be determined by the student's committee but **must** include an oral portion. The Candidacy Examination Committee must be the same as in the original examination unless substitution is approved by the Dean of the Graduate School. The Graduate School also requires an external faculty member serve as a representative of the Graduate School in case of a second oral exam.

Dissertation

See above for guidelines on the dissertation committee.

Students planning to graduate in a given semester are required to submit the **Application to Graduate** by the third Friday of that semester via GradForms.

Writing and defending a doctoral dissertation represents the culmination of the PhD program. The dissertation must conform to Graduate School format requirements as described in the <u>Guidelines for Preparing and Submitting Theses</u>, <u>Dissertations and D.M.A. Documents</u>. On questions of style, such as the format of references, students are advised to refer to the "Information for Contributors" for journals published by the Association of American Geographers and the American Meteorological Society. Not noted in these guidelines are the following: you can print double sided, and images are not required to be in color.

Initially you will prepare a working draft of the dissertation for your committee. Expect this draft to undergo several revisions. Once approved by your committee, you must prepare a draft that presents the research material in the approved style and format; this draft should include an abstract of 350 words or less.

If this draft is approved by your committee, you need to initiate the **Application for Final Exam** form via <u>GradForms</u>. This form must be <u>approved by</u> your advisor, the GPC, and the Graduate School <u>no less than two weeks prior to the date of the Final Oral Examination</u>; to ensure completing the form on time, you should start the form prior to the deadline. You must submit a complete hard copy of your dissertation draft to the Graduate School at the time the Application for Final Exam form is submitted. All members of your committee, including the appointed Graduate School Representative, must receive a copy of the final draft (in digital or paper form) at least one week before the Final Oral Examination.

After the final exam (see below), your committee may indicate additional revisions that are required before the final draft is submitted to the Graduate School.

To summarize, your dissertation goes through three stages. The first stage consists of working drafts on which you seek advisor (and often committee) feedback. The second stage is the approved draft, which is submitted to the Graduate School in preparation for the final oral examination. This draft is defended. The third stage involves revising, polishing, and submitting to the Graduate School the final dissertation after the oral examination.

Dissertation Defense/ Final Oral Examination

The "dissertation defense" is also known as the Final Oral Examination. The purpose of this exam is to test "originality, independence of thought, the ability to synthesize and interpret, and the quality of research presented." The examination is taken by doctoral candidates who have satisfied all other requirements for the degree. This examination is largely concerned with the dissertation, but it may range over the entire field of the candidate's specialty.

The Final Oral Examination is expected to occur at the end of your fourth year and must occur within five years of the successful completion of the Candidacy Examination (a Graduate School rule). The student must be registered for the appropriate number of credit hours during the semester in which the examination is taken (please see Graduate School rules). The Final Oral Examination Committee consists of your committee plus a Graduate School Representative (assigned by the Graduate School). By decision of the Graduate Studies Committee, you will be considered to have successfully completed your Final Oral Examination only if the decision of "satisfactory" is unanimous.

The student is responsible for scheduling the defense, and for booking the room in which it will take place. This room should have the capacity to accommodate the public and have infrastructure for a presentation.

The entire exam takes two hours and has two main components. There is some flexibility regarding the precise sequencing of the exam, but it must include the following components:

Presentation by the candidate of the research. This portion is open to the public and
department attendance is encouraged. The presentation should be modeled after those given
at professional meetings; it should last no more than 20 minutes. The public will be permitted
to ask questions, but the question period may not exceed 10 minutes. At least a week prior to the
defense, students must send their abstract along with the time and date of the defense to the

- GPC for circulation to the department. You will then attach the flyer the GPC generates to the Dissertation Public Presentation milestone in GradCentral in order to complete it.
- Private discussion; this 'closed' portion of the exam should take up the majority of the examination period as it is the primary evaluative portion. All visitors must withdraw, leaving only the student, the committee, and the Graduate Faculty Representative. The representative's role is to ensure that the defense is carried out thoroughly and fairly over the remaining 90 minutes. All committee members and the Graduate Faculty Representative ask the student questions about their dissertation. The discussion continues until about 10 minutes prior to the end of the allotted time. The student is then asked to step out of the room while the committee and Grad Faculty Rep discuss their assessment of the student's performance. The student is then called back into the room and informed of the result.

In some cases, a committee member cannot be physically present; one member may attend through video conferencing without a petition. Beyond one member, the student must petition the Graduate School via GradForms.

It is common for the committee to request changes to the dissertation at this stage. It is the responsibility of the student and their advisor to ensure that these changes are made prior to the submission of the dissertation to the Graduate School.

On completion of all such changes, the student must file a copy of the dissertation with the Graduate School. At the same time, all committee members must sign the Final Approval form via GradForms.

<u>All additional graduation requirements as specified in the Graduate School Handbook</u> must be met prior to graduation.

5. FINANCIAL SUPPORT

A. Graduate Student Funding

The Department recognizes the importance of contributing to graduate scholarship by reducing the financial burden of graduate education. For this reason, every effort is made to provide qualified candidates with financial assistance.

Graduate students typically receive funding in the form of a **Graduate Associate (GA)** or a **Fellowship** appointment. Graduate associates and fellows differ in terms of administration of their appointment as well as in enrollment criteria to maintain an active appointment. Students are usually appointed as *fellows* either because they were awarded University Fellowships from the Graduate School or because they have secured funding from outside of the Department. In some situations, graduate students are appointed as fellows to faculty research projects. Most funded graduate students in Geography are appointed as *graduate associates* (GAs). There are three types of GA positions: Graduate Teaching Associate (GTA), Graduate Research Associate (GRA), and Graduate Administrative Associate (GAA).

Responsibilities and Evaluation

<u>Graduate Fellows</u>: Graduate fellowships typically combine non-service years with service years. Fellows are expected to enroll in 12 credit hours every academic term they are on appointment (6 credit hours for summer term) pre-candidacy and 3 credit hours post-candidacy.

<u>Graduate Research Associates</u>: The responsibilities and format for evaluation of GRAs are determined by the project manager on a semester basis. GRAs must enroll for at least 8 credit hours during fall and spring semesters, 4 credit hours during summer term (if appointed or using their summer fee waiver) and 3 credit hours post-candidacy.

<u>Graduate Teaching Associates</u>: GTA responsibilities vary by appointment. Most GTAs act as assistants to a classroom instructor; in some cases this may include teaching lab sections independently. GTA responsibilities are established at the beginning of the semester in consultation with the course instructor.

Some GTAs have full teaching responsibilities. These positions will generally be reserved for PhD students who are post-candidacy. GTAs acting as instructors are evaluated through university SEIs (Student Evaluation of Instructor). GTAs must enroll for at least 8 credit hours during fall and spring semesters, 4 credit hours during summer term and 3 credit hours post-candidacy.

<u>Graduate Administrative Associates</u>: The responsibilities and evaluation of GAAs are determined based on the individual appointment. GAAs must enroll for at least 8 credit hours during fall and spring semesters, 4 credit hours during summer term and 3 credit hours post-candidacy.

Registration Requirements

Students should review the registration requirement table and verify that they are enrolled in a sufficient number of credit hours for their respective appointment and academic term (e.g., fall, summer). Registration requirements are in effect for any term in which the student is appointed as a GA or fellow or in which the student is using their summer fee waiver. See Course Load in the Graduate School Handbook.

	Autumn/Spring Semesters	Summer
Most Students	8 hours*	4 hours
Fellowship/Trainees	12 hours	6 hours
Post-candidacy Students	3 hours	3 hours
Veterans	6 hours	4 hours

^{*}Note: these are the MINIMUM graduate credit hours needed to receive stipend and tuition benefits. Registering for the minimum number of graduate credit hours may not satisfy program requirements.

Students must maintain the appropriate level of enrollment throughout the term. Students should register for courses as soon as their enrollment window is available. Deadlines for enrollment are as follows; Autumn semester enrollment deadline is **August 1**st of any given year, Spring semester enrollment deadline is **December 1**st of any given year, and Summer semester enrollment deadline is **April 15**th of any given year. Enrollment in insufficient credit hours before the start of the term will result in a late fee, which the student will be responsible for paying. Please note that wait listed courses do not count toward minimum credit hour enrollment. Students who are waitlisted in a course should seek the advice of the GSC Chair on how to proceed if they feel they will fall short of the required course credit hours.

Stipends

"Stipend" refers to what students are paid as compensation for their teaching efforts. Stipend amounts follow set guidelines, as outlined below. Even among students paid at the same rate (e.g., GTA Level II), there can be differences in total monthly 'take-home' pay because of variations in payroll deductions or taxes. If you have any questions about the accuracy or fairness of your pay, please raise the issue with the department's Human Resources/Fiscal Manger, Suzanne Mikos.

Also, to ensure that you receive your paychecks, reimbursements, or other funds in a timely manner, please make any changes in both your Buckeyelink Student Center page and Employee Self Service page through the HR office.

- The Graduate Associate (GTA) Level I stipend is for masters.
- The Graduate Associate Level II stipend is for pre-candidacy PhD students.
- The Graduate Associate Level III stipend is for post-candidacy students. This stipend level takes effect the first full term following attainment of post-candidacy status.

Stipends for Graduate Research Associates are comparable to those of Graduate Teaching Associates. Stipends for Fellows are indicated in their letters of offer (in the case of University Fellows) or arranged with the fellowship sponsor. Students receive their stipends on the last working

day of the month. The first paycheck will be received in the last day of the first month of the academic term.

B. Fees

Payment of Tuition and Fees

Fellows and Graduate Associates with a 50% appointment (20 hrs/wk) or greater receive a waiver of university tuition and non-resident fees. Students with a 25% appointment receive a waiver of half of these fees. The student must make continuous progress toward the completion of their degree and meet enrollment requirements for the duration of his or her appointment in order to receive this tuition and fee benefit.

Summer Session Tuition and Fee Waiver

Students who are on a graduate associate appointment of 50% or more for the two semesters immediately preceding summer semester are granted a waiver of out-of-state fees and university tuition for the summer session without holding an appointment. The student must meet enrollment criteria for the duration of this summer session to receive this waiver. The student is also responsible for paying all additional fees associated with enrollment (e.g., Student Union Fee, Student Activity Fee).

Students using the summer fee authorization must be registered for at least four credit hours. Post-candidacy doctoral students must register for at least three credit hours. A graduate student who elects not to enroll during the summer session may not defer the use of the summer fee authorization.

Students who have been on graduate associate appointments between 25-49% for two consecutive semesters are eligible to receive a summer session fee waiver at half the full authorization rate.

Other Tuition and Fee Waivers

There are two additional ways for students to obtain tuition awards; these are only available to students with external research funding who do not have Graduate Assistant or Fellowship positions that already provide tuition and fee authorizations. For example, post-candidacy students may not be able to hold a GTA position while in the field for dissertation research, yet are still required to enroll in the university; such students *may* be eligible for these programs.

<u>The Graduate School's Matching Tuition and Fee Award</u>: This is for students who are applying for a prestigious, nationally competitive fellowship, i.e. an award with a stipend (e.g. Fulbright). Students must work with the Graduate Studies Committee to apply for this award *prior to* their application for the specific fellowship. (Faculty may also apply to this program to support graduate students on their grants.)

<u>The Arts & Sciences Continuous Enrollment Tuition Award</u>: Post-candidacy PhD students who have secured prestigious external funding that does not provide a stipend (e.g. the National Science Foundation DDRI) may be eligible to apply for these funds. Students apply *after* receiving an award.

Other Fees

All other fees will not be paid by the department. These fees, as well as the student's portion of the health insurance premium, are deducted each month via payroll deduction (see below).

C. Benefits

For a complete description of benefits available to graduate associates, see the <u>Office of Human</u> Resources page on Student Employee Benefits.

Health Insurance

Ohio State Students must provide proof of health insurance each year during the annual Student Health insurance selection/waiver.

Student Health Insurance offer benefits that include medical and prescription drug coverage. Student Health Insurance's health plan includes medical, dental and vision coverage and Scholastic Emergency Services' global emergency medical assistance.

The University provides a health subsidy for graduate students with fellowship, traineeship, or 50% or greater GA appointments, paid through the Ohio State payroll system. GAs with 50% or greater appointments for autumn and spring semesters are entitled to a health subsidy for the immediately following summer session without being on appointment. The University subsidy is 85% of the Student Health Insurance (SHI) premium for eligible funded GAs enrolled in single coverage. The University also provides a subsidy of 85 % of the SHI premium for enrolled dependents of eligible funded graduate students.

To qualify, students will not need to be registered for classes to be covered, as insurance will become annual with students' share of the premium collected by payroll deduction for autumn semester (Sept-Dec), and for spring AND summer semesters (January-April). Eligible GAs, fellows and trainees will receive this summer coverage even if they graduate, withdraw, or are otherwise no longer here.

The health insurance fee also includes medical, pharmacy, dental and vision coverage, described at the <u>Student Health Insurance website</u>.

Retirement Programs

Graduate associates have the option to either elect to participate in the applicable retirement system or to be exempt from retirement withholding. The election must occur within 30 days of becoming an employee. If retirement election forms are not submitted within this timeframe, the student by default will enroll in OPERS, which involves contributing 10% of one's gross pay to a retirement program. Retirement options cannot be changed without a change in employment status after this 30 day window.

The optional exemption is only available to students who have registered for sufficient credit hours. under- enrolled students do not qualify for exemption from the OPERS program.

Graduate fellows are not considered employees and do not contribute to this retirement program.

Note that public institutions in Ohio do **not** participate in the federal Social Security system, other than contributions to Medicare Hospital Insurance Fund (Medicare Part A). The Medicare contribution rate is currently 1.45% of earnings.

D. Payroll Deduction

Student fees and health insurance premiums are deducted from students' paychecks evenly throughout the term. Students are **strongly** encouraged to review both their statement of account and their paystub to verify the accuracy of the deductions.

Direct Deposit

Students who are paid by the university can access their personal information, including direct deposit and pay stub information, by visiting eprofile.osu.edu and logging in with their name.# and password.

Students are encouraged to <u>enroll in direct deposit</u>. You can enroll for direct deposit one business day after your appointment is entered into the Human Resource Information.

❖ View Pay Stub

The Ohio State University uses a paperless system for all paychecks and pay stub information. All faculty, staff and student employees can now receive their pay stub information online or via touchtone telephone using an interactive voice response (IVR) system.

Receive your pay stub information by visiting your <u>eprofile.osu.edu</u>. See also <u>My Paycheck</u> at the Office of the Controller.

E. Reappointment and "Contracts"

The department is committed to working with each student, given adequate academic progress, to secure financial support throughout the student's graduate career at Ohio State.

When a student is admitted to the graduate program, they typically receive a **letter of offer**. This letter outlines the department's **intent** with respect to the financial support of that student. By laying out the details of student funding over their anticipated fundable tenure in the program (two or four years, typically), the department signals that it is keen and prepared to support the student as laid out in the letter. This letter, however, does **not** represent a contract between the department and the student, and it does not **guarantee** that the student receive the funds as described. This is because funding commitments are renewed every year based on evidence (garnered during the <u>spring review process</u>) of the student's <u>good progress</u> through their program. <u>Should the student not make good progress</u> their appointment may not be renewed.

Renewal of an appointment is signaled by the annual contract that you will receive through DocuSign. This multi-page document is signed only once good progress by the student has been established. This is a **formal contract** in that it is a binding document guaranteeing the student's appointment for the following year.

All GAs must have a Graduate Associate Appointment Document on file with the department's fiscal officer. The document must be signed by the HR manager, the Department Chair, the student and (in cases of appointments sponsored by individual faculty members) the sponsoring faculty member.

Every effort is made to make reappointment decisions before the end of the academic year. However, contracts may not go out until the summer semester.

In some cases, students win research or fellowship support that 'trumps' their GA appointment. We encourage and celebrate such support. In such cases, the student should work closely with their advisor, the Department Chair, and the departmental fiscal officer to come to an agreement regarding how and for how long the student's GA-ship be suspended, when it will be renewed, and whether such support should constitute an "additional year" of departmental support.

F. Travel and Research Support

The Department encourages travel to conduct and present research, as shown by its financial support for both. When the department is unable to provide support, students should look for other funding opportunities. Some of the more common ones are listed below.

Expenditures must follow University policies and procedures. Please contact Caitlin Naber or Suzanne Mikos with any questions regarding travel policies.

Departmental Support for Presenting at Conferences

The department provides support to PhD students to present their research at one meeting (per year) of the AAG, AGU, or AMS, all of which are important disciplinary conferences of national and international standing. You do not need to apply for these funds, but they do require that you fill out necessary travel paperwork *before* the conference. Please see the Graduate Program Chair to make the necessary arrangements for securing these funds.

On occasion, individual faculty members provide travel or research support for their mentees. This support is given at the discretion of individual faculty members with Department Chair's approval. Students also have to fill out necessary travel paperwork *before* the conference.

❖ Departmental Awards for Outstanding Graduate Students

There are several departmental awards for outstanding graduate students: the Rayner Scholarship for Fieldwork, Fenburr Travel Scholarship, Lakshmanan Chatterjee Scholarship, and Miller Scholarship. In the past these have required special applications. Starting in 2016-2017, we will instead consider students for these funds as part of the annual spring review. Your form and

portfolio, along with the advice of your advisor and committee, will form the basis for making decisions about awards.

<u>Rayner Scholarship for Fieldwork</u> This scholarship is intended to support fieldwork endeavors by graduate students. 'Fieldwork' is understood as any form of data generation that is conducted in order to address a research question. Fieldwork costs might therefore include expenses related to travel to a field site, supply or equipment costs, access fees (to libraries, archives) or other research-related expenses. This competition is open to PhD students.

<u>Fenburr Travel Scholarship for Outstanding Graduate Students</u> This scholarship is intended to offset costs of travel associated with professional development. 'Professional development' typically refers to activities related to the conduct or dissemination of research, such as training workshops, conferences, or fieldwork. This competition is open to PhD and Master's students.

Lakshmanan Chatterjee Fellowship for Outstanding PhD Students This endowment was established June 5, 2009 with gifts from Dr. Tiruvarur R. Lakshmanan and Dr. Lata Chatterjee to be used to recognize a distinguished graduate student in the Department of Geography who is in the PhD program. This award is intended to benefit a PhD student either from the Global South (Asia, Africa, or Latin America) or carrying out research on the Global South. The award should support a student professionally focused on issues of benefit to humanity, and with demonstrated professional promise. This will provide funds for research.

The E. Willard and Ruby S. Miller Award The E. Willard and Ruby S. Miller Award is the highest recognition the department can bestow on a graduate student. The award is given in recognition of potential to make a major contribution to geography or its subfield(s), particularly through scholarship and scholarly writing. Awardees must have at least one single-authored or first-authored paper submitted, forthcoming, or published in a major professional journal in Geography or Atmospheric Sciences. The quality of the manuscript will be a central criterion in judging nominees. All papers to be considered must be largely (if not entirely) carried out during tenure at Ohio State.

University Awards for Outstanding Graduate Students

There are also funding opportunities from the university. Students should investigate numerous sources specific to their research focus (e.g. <u>Mershon Center</u>, <u>Environmental Policy Initiative</u>). Listed here are general opportunities available to most students.

<u>Ray Travel Award</u> The Edward J. Ray Travel Award for Scholarship and Service (Ray Award) encourages and enables graduate students across the university to participate in professional conferences, both in their respective fields and in the broader academic community, by reimbursing or partially reimbursing the expenses incurred by graduate students during travel to conferences and meetings to present original research. This award is offered through the Council of Graduate Students and awards are based on various service criteria.

<u>Office of International Affairs</u> The office of international affairs provides scholarships and grants for graduate students, including the International Affairs Grant, Fulbright-Hays Doctoral Dissertation

Research Abroad, FLAS Fellowships, and Mershon Center Graduate Student Grants. See the <u>complete</u> list of opportunities offered by OIA.

A note on departmental cash matches: The International Affairs Grant and occasionally others require the Departmental cost-sharing contribution of \$500. Students are expected to ask for such a contribution from the Department Chair *before* applying for the grant. Although the Department wishes to support graduate students as much as possible, we are unable to approve all funding requests received.

The Presidential Fellowship

The <u>Presidential Fellowship</u> is the most prestigious award given by the Graduate School to recognize the outstanding scholarly accomplishments and potential of graduate students entering the final phase of their dissertation research. The Presidential Fellowship provides financial support so that each Presidential fellow may devote one year of full-time study to the completion of his or her dissertation or degree project unimpeded by other duties. Competitions are held autumn and spring semesters. This award is for PhD students who will be post-candidacy by the nomination deadline. <u>Guidelines and full eligibility requirements</u> are provided by the Graduate School.

PhD students do not apply directly for a Presidential Fellowship, but instead are nominated by their departments. As of 2016-2017, the Geography procedure will be as follows:

- 1. <u>By the second Friday of each semester</u>, any eligible PhD student who wishes to be nominated by the department will submit to the Graduate Program Coordinator (by email) a pre-application. This will consist of two of the elements of the full nomination package:
 - a. An up-to-date CV
 - b. A statement of no more than 5 pages about the research
- 2. The GSC will choose which student to nominate. Only in exceptional circumstances will more than one student be nominated.
- 3. The GSC will work with the student and advisor to complete the full package of application materials, which is quite extensive. Note that this package requires at least one letter of reference from a faculty member *not* at OSU.
- 4. The full nomination package is due to the Graduate School by the third Friday of October for autumn and the last Friday of March for spring.

6. Appendix A. Geography MA & PhD Requirements

Masters: 30 total graduate credits (at least 80% must be taken at OSU)		
COURSES/EVENTS	RECOMMENDED SEMESTER	
Required courses:		
7101 Research Design	Year 1, Autumn	
8109 Professionalization	Year 1, Autumn	
7102 Fieldwork OR 8102 Advanced Spatial Data	Year 1, Spring	
Analysis		
Elective courses:		
Any graduate (5000-level) course approved by your	Year 1, Autumn and Spring	
advisor; may include 5193 Individual Studies		
5193 Individual Studies	Year 2	
Thesis defense	End of Year 2	

PhD: 50 post-Master's graduate credits, or 80 total graduate credits		
COURSES/EVENTS	RECOMMENDED SEMESTER	
Required courses:		
7101 Research Design	Year 1, Autumn	
8109 Professionalization	Year 1, Autumn	
7102 Fieldwork OR 8102 Advanced Spatial Data	Year 1, Spring	
Analysis		
8100 Geographic Thought	Year 1, Spring	
8999 Dissertation	Every semester from candidacy to	
	graduation	
Elective courses:		
Any graduate (5000-level) course approved by your	Year 1, Autumn and Spring	
advisor; may include 7193 Individual Studies		
7193 Individual Studies	Year 2	
Candidacy exam	End of Year 2	
Dissertation defense	End of Year 4	

- Students may adjust the course schedule based on consultation with their advisor or the appropriate member of the GSC.
- GEOG 5100 is a prerequisite for 8102
- STAT 6630 can be substituted for 8102

7. Appendix B. ASP MA & PhD Requirements

Masters: 30 total graduate credits (at least 80% must be taken at OSU)		
COURSES/EVENTS	RECOMMENDED SEMESTER	
Required courses:		
ATMOSSC 5950 Atmospheric Thermodynamics	Year 1, Autumn	
ATMOSSC 5951 Dynamic Meteorology I	Year 1, Spring	
ATMOSSC 5952 Dynamic Meteorology II	Year 2, Autumn	
Elective courses:		
Select at least two of the following: GEOG 5900, 5921,	Autumn and Spring	
5940, 5941, 5942, 8902, 8920, 8950, 8960;		
ATMOSSC 5901, 8900		
5193 Individual Studies	Year 2	
8900-level Seminar	Years 1 & 2, 6 credit hours	
Thesis defense	End of Year 2	

PhD: 50 post-Master's graduate credits, or 80 total graduate credits		
COURSES/EVENTS	RECOMMENDED SEMESTER	
Required courses:		
2 or more 8900 level ATMOSSC/GEOG seminars	Year 1-2	
8999 Dissertation	Every semester from candidacy to	
	graduation	
Elective courses:		
Curriculum developed in consultation with your	Year 1-2	
advisor; may include 7193 Individual Studies		
Candidacy exam	End of Year 2	
Dissertation defense	End of Year 4	

• Students may adjust the course schedule based on consultation with their advisor or the appropriate member of the GSC.