

UM Geography Graduate Student Handbook, August 15, 2016

The University of Montana-Missoula

COLLEGE OF HUMANITIES & SCIENCES

DEPARTMENT OF GEOGRAPHY
GRADUATE STUDENT HANDBOOK:
PROGRAM, POLICIES & PROCEDURES

August 2016



Table of Contents

| | |
|--|----|
| DEPARTMENT GRADUATE PROGRAM OVERVIEW | 1 |
| ADMISSIONS | 1 |
| GRADUATE FUNDING OPPORTUNITIES..... | 3 |
| Teaching Assistantships..... | 3 |
| Research Assistantships | 4 |
| Additional Funding Opportunities | 4 |
| GRADUATE CURRICULUM AND ACADEMIC STANDARDS | 5 |
| General Requirements..... | 5 |
| Thesis, Professional Paper, and Non-Thesis Tracks | 6 |
| Graduate Courses | 6 |
| Academic Standards..... | 7 |
| Continuous Registration & Leave Of Absence..... | 7 |
| GRADUATE STUDENT ADVISING & COMMITTEE | 7 |
| Advisor..... | 7 |
| Graduate Committee | 7 |
| New Student Orientation..... | 8 |
| RESEARCH PLANNING, & ASSESSING STUDENT PROGRESS | 8 |
| FACILITIES, COMMUNICATION, CAMPUS & PROFESSIONAL COMMUNITY | 13 |
| Geography Computer Labs..... | 13 |
| Geography Listserv | 13 |
| Geography Club and Gamma Theta Upsilon..... | 14 |
| UM's Graduate Student Association and Other Groups..... | 14 |
| Scholarly & Professional Meeting Participation..... | 14 |
| APPENDIX..... | 16 |
| Geography MS Non-thesis Track: Portfolio and Comprehensive Examination Guidelines | 16 |

“Graduate school can be a great deal of fun, particularly if you have an unflagging interest in geography. The interaction between students and faculty, the seminar readings, the lengthy discussions of different theories and concepts, the discovery of new ideas and different interpretations, and, finally, the challenge to learn how to learn are what graduate school is all about. Your ultimate success will depend, to some extent, on your work ethic and almost certainly on your willingness to embrace new ideas. Ideally, graduate school is a combination of students and professors working together to create a setting for scholarly and scientific imagination.”

——David Hornbeck, *On Becoming a Professional Geographer* (Kenzer et al. 1989)

DEPARTMENT GRADUATE PROGRAM OVERVIEW

Welcome to the Department of Geography. This handbook is intended to outline the graduate program requirements, policies, and procedures for prospective, incoming and current Geography students and faculty. The handbook also describes a set of expectations of all graduate students.

The Department of Geography maintains particular strengths in each of the following major branches within the discipline: (i) physical geography (geomorphology, mountain environments, climate and global change); (ii) human–environment interaction (land use and environmental planning and management, water resources management and policy, and mountain-society interactions); (iii) geography and society (sustainable communities, economic geography of rural areas, migration and population change); (iv) regional geography (with particular strengths in the geography of Montana, North America, Africa, and Central, Southwest, and South Asia); and (v) geographical techniques (cartographic principles and design, geographic information systems [GIS], remote sensing, transportation planning and GIS sciences and technologies [GIST], field methods, quantitative and qualitative methods). In addition, our programs focus especially on the thematic areas of Mountain Geography, Community and Environmental Planning, and Cartography/GIS.

Major strengths of Geography are diversity and synthesis in both research and teaching. The department’s faculty has expertise in numerous sub-disciplines of geography and field experience in numerous countries and world regions. The diverse backgrounds in scholarship are reflected in teaching activities such as course design, pedagogical innovations, and invited guest lecturing. In this sense, Geography stands in the tradition of Robert Maynard Hutchins who famously underscored the importance of researching what one teaches and teaching what one researches.

Graduate level studies in Geography prepare candidates for a variety of career opportunities or for doctoral studies in Geography and related disciplines. A broad range of environmental and societal issues have geographical dimensions, and geographical training and methodologies are basic to the solution of many real-world problems. As a scientific discipline, Geography opens the door to numerous professional pursuits in education, government, business and industry in the U.S. and beyond.

ADMISSIONS

We encourage students with majors in geography or allied social or natural sciences to enter our graduate program. We do not require incoming students to have completed an exact equivalent of our undergraduate B.A. and B.S. curricula prior to admission. We accept graduate students with a diversity of interests and attempt to mentor them in the most exciting and promising avenues of current research. At the discretion of the faculty and

Graduate Advisor, deficiencies in coursework may be identified with the expectation that these deficiencies will be satisfied during the student's first year in the program and with a schedule of remedial work. Unless previously taken, all graduate students must complete Introduction to Cartography and GIS (GPHY 284).

Successful applicants are precise in planning, crafting, and submitting application materials in a manner that showcases professionalism and potential as a scholar and researcher. All application materials must be submitted by March 1. Contacting the Department Graduate Program Director and faculty members in the initial phase of the application process is highly recommended.

All of the following criteria are considered in evaluating applications. The first criterion – matching interest with faculty expertise – is critical for determining whether a faculty member agrees to serve as graduate advisor. The Department requires that at least one faculty member agrees to advise a prospective student prior to admission into the program. For this reason, applicants are strongly encouraged to identify and contact potential faculty advisors with whom their interests align. Successful applications satisfy the following admissions criteria:

- Match between research interests and faculty expertise;
- Compelling 'statement of intent': This is read carefully in order to determine the applicant's intentions for pursuing a graduate degree, and future career and professional plans;
- Quality of academic record: The applicant's complete academic record is evaluated. Of particular relevance are the grade point average (GPA of 3.0 or higher), performance in upper division courses, preparation in geography and cognate fields and quality of institutions attended;
- Performance on standardized exams (GRE/TOEFL): High scores for verbal, quantitative, and analytical GRE exams.;
- Three letters of recommendation: Letters should be from individuals who are able to assess academic performance and potential for graduate research;
- A Curriculum Vitae or Resume, which should, if applicable, include other relevant experience: Experience that is related to educational and career goals is of interest and considered in making admissions and funding decisions;
- Letter of interest for a Teaching Assistantship (if applicable).

The Department gives consideration to the above areas while also taking into consideration range of experience and variance in measures of academic performance. Admission may be full or provisional. Since the GRE is an important criterion considered in the admission process, familiarizing oneself with the test's content in advance of taking it is strongly recommended. The [official GRE site](#) of the Educational Testing Service (ETS) is a good information starting point.

In addition to GRE scores, international applicants and graduates from non-English speaking universities need to submit TOEFL, IELTS, or MELAB scores. For more information, visit the Graduate School's [International Student Admission page](#).

Applicants interested in a Teaching Assistantship should check the appropriate box in the online application and include a letter to the Department that articulates one's interests and qualifications for the position. The statement should emphasize specific skills, motivation and level of commitment, previous experience with instruction and/or mentoring, and knowledge and abilities as they relate to courses offered in the Department.

Students are encouraged to consult the University of Montana Graduate School website (<http://www.umt.edu/grad/>) for additional information on the application process and policies concerning degree requirements, transfer credit, and residency requirements.

GRADUATE FUNDING OPPORTUNITIES

The financial demands of seeking a graduate degree can be tremendous. All graduate students are strongly encouraged to pursue opportunities for obtaining financial support for their studies.

General information on tuition and financial aid is available through the Graduate School. Department financial assistance may be available in the form of Teaching and Research Assistantships. Fellowships, scholarships or other external channels of support should be explored early in the application process. The graduate student Advisors can also provide assistance in identifying and pursuing funding opportunities. However, it is important to note that neither the faculty Advisor, the Department, or the College of Humanities and Sciences can guarantee that a line of funding will be available.

Teaching Assistantships

In any given year the Department may have four to five graduate Teaching Assistantships (TAs) available to graduate students. These are awarded on a competitive basis by the Department based on qualifications, background in courses for which TAs are needed on a semester or yearly basis, and merit in the first year. A TAship may be continued into the second year assuming satisfactory performance. TAs are often needed for large lecture classes that can have over 100 students; however, TAs assist with smaller upper-division writing, methods, cartography, and GIS courses. Graduate students serving in these TA positions assist members of the faculty with curriculum delivery in several ways including leading labs or discussion sections, delivering lectures, and grading assignments. Full-time TAs are expected to work 20 hours per week for 16 weeks each semester. TAs receive a tuition fee waiver in addition to a stipend. However, a tuition waiver does not waive other mandatory fees charged by the University. Both incoming and

current graduate students may be eligible for TAs. TAs are required to register for nine credits each semester.

TAs are typically not awarded to provisionally admitted students. TAs will not be awarded beyond the second year of graduate studies. For additional details, please see the Departmental Handbook for Teaching Assistants.

Research Assistantships

Research Assistantships (RAs) may be available on a competitive basis, depending upon the grant awards to faculty members. The number of RAs offered varies by year depending upon available grant funding. Either full or partial awards may be given. Individuals are encouraged to speak directly with faculty to find out if there are any RA positions available. Compensation and expectations vary depending upon the funding source, project objectives, and scope of work.

Additional Funding Opportunities

In addition to TAs and RAs, there are many potential funding opportunities such as scholarships, fellowships, and paid internships available to support graduate students pursuing degrees. Many professional societies provide small grants to assist student research, including, for example, the Association of American Geographers (see specific specialty groups), *Sigma Xi* Scientific Research Society, and the Montana Association of GI Professionals. A number of external funding programs and resources spanning a variety of fields are regularly advertised in the Department and in other campus venues. Finally, private organizations also provide opportunities for graduate student funding. In all cases, these are awarded on a competitive basis and involve an application process.

For a list and some general information on campus-wide graduate level scholarships, visit UM's [Graduate Scholarships page](#). In addition to campus-wide award opportunities, scholarships more specifically geared to Geography students are offered. For example, each year, the Harold W. Bockemuehl Scholarship is awarded to either a graduate or undergraduate student focusing on cartography and GIS. More information on scholarships for Geography students can be found on the Department's [Scholarships, Awards, and Assistantships page](#).

The Montana Association of Geographic Information Professionals (MAGIP) offers scholarships to which first-year graduate students can apply. More information can be found on UM's [College of Forestry and Conservation's Scholarships page](#). MAGIP also offers conference registration scholarships for the annual GIS meeting. Additionally, the [Montana Association of Planners \(MAP\)](#) offers scholarships to cover student attendance at their annual conference.

GRADUATE CURRICULUM AND ACADEMIC STANDARDS

Faculty in Geography endeavor to provide the best learning environment for graduate education and research engagement. The Department strives to provide a rich learning environment and mentoring to support learning, scientific inquiry, critical thinking, collaboration, and intellectual synergy. The Department offers two Master's degree programs with the following delineations: M.A. and M.S. in General Geography; M.S. in Geography with Option in Cartography and GIS (CGIS); and M.S. in Geography with Option in Community and Environmental Planning (CEP).

The Department also offers an interdisciplinary Certificate in GIS Sciences and Technologies in collaboration with the College of Forestry and Conservation. This certificate can be completed by undergraduates, by post-baccalaureate and by graduate students. Students seeking certification in GIS Sciences and Technologies should visit the following link: <http://www.cfc.umt.edu/giscertificate/default.php>.

The curricula for the M.A. and M.S. in General Geography are designed to offer students the most flexibility. The M.S. degree with either the Option in CGIS or the Option in CEP is structured to allow for the selection of electives that align with students' interests. In all cases, students' programs of study can be highly flexible and individualized. Like all UM graduate students, students in Geography graduate programs must meet university-wide standards and policies, such as 50% 500-level or the continuous registration requirements. (Please see below.)

General Requirements

Course requirements for the M.A., M.S., and the options in the M.S. vary depending on the program and the track that is followed (see below). In addition to these department requirements, students have the opportunity to select from a wide variety of course offerings in Geography and allied social and natural sciences. The design and approach to students' program of study is largely dependent upon research interests and professional goals and objectives.

MA or MS in General Geography (30 credit minimum plus 3 thesis credits, or 36 credit minimum with the non-thesis track): The M.A. or M.S. in General Geography provides students with the most flexibility. In addition to the required core courses, and depending upon the track followed, students must take an additional seminar course, and a significant number of elective credits.

MS with Option in Cartography & GIS (34 credit minimum plus 3 thesis credits, or 40 credit minimum with the non-thesis track): This degree option is focused on cartographic science and GIS methods and technologies, including remote sensing and geospatial

analysis. In addition to the thesis track, this option offers a professional paper track and a non-thesis/portfolio track.

MS with Option in Community & Environmental Planning (33 credit minimum plus 3 thesis credits, or 39 credit minimum with the non-thesis track): In addition to the core geography graduate courses, students are required to take 22-23 credits in required courses. This option provides students with training in planning (urban, rural, transportation, environmental, and natural resources) and prepares them for employment in local, state, and federal agencies as well as the nonprofit and private sectors. In addition to courses in geography, students may select courses in sociology, environmental studies, forestry, political science, law, and other relevant disciplines. Similar to the CGIS Option, students may, with approval of their advisor, elect to pursue the thesis, professional paper, or non-thesis/portfolio track.

Thesis, Professional Paper, and Non-Thesis Tracks

In addition to the minimum credit hours of coursework required for the Master's degree, a student must complete, a thesis or professional paper, or the requirements of the non-thesis track (portfolio, plus written and oral comprehensive exams, and additional course work.) The decision regarding which track is to be pursued must be made by the end of the first semester in the program, through communication between student and advisor and with advisor's approval. There may be instances where students are admitted into a particular track within an option, based on the student background, career goals and match with faculty expertise.

A thesis is theoretically oriented and sets out to address a question through the production of new knowledge. A thesis can take the form of a conventional monograph or one or more papers of publishable quality. A professional paper is more applied and problem-oriented and geared toward offering a solution to a "live" problem. The thesis and professional paper tracks require the formation of a graduate committee and a formal defense. The non-thesis track requires a compilation of a portfolio showcasing significant academic works along with comprehensive examinations with written and oral components. (Please see Appendix for details on the non-thesis track).

Graduate Courses

All graduate courses at UM are listed at the 500 or 600 level. Graduate students are able to satisfy some degree requirements by taking undergraduate (UG) courses at the 400 level. In these cases, a graduate credit increment is structured into the course. Please note that the Graduate School requires that 50% of the coursework be at the graduate level (500 or higher). The University Catalog provides the course descriptions, and the online UM course schedule will show the list of courses being offered in the current semester.

Academic Standards

Graduate students should be familiar with the University of Montana's guidelines and expectations as outlined in the Student Conduct Code:
<http://www.umt.edu/vpsa/documents/Student%20Conduct%20Code%20PDF-%20FINAL%208-27-13.pdf>

Continuous Registration & Leave Of Absence

The degree programs are designed to be completed in two years, providing that no 'make-up' courses are needed. Full-time graduate student status requires registering for 9 credits each semester, although students often carry a heavier credit load during the first year. Full-time Teaching and Research Assistants must register for 9 credits per semester.

Continuous enrollment requires at least 3 credits per semester. Exceptions to the continuous enrollment policy require formal approval by the Graduate School, for instance a leave-of-absence petition.

GRADUATE STUDENT ADVISING & COMMITTEE

Advisor

At the time of admittance to the Graduate Program in Geography, each student is assigned to a faculty advisor. Students are expected to work closely with their faculty advisors through their tenure in the program. Students need to consult with their advisor about the choice of courses; configuration of program of study; development of thesis or professional paper projects, or portfolio content and configuration; and the formation of their graduate committee. Students are highly encouraged to meet early and often with their advisors. Faculty mentorship is critical to keeping on track with the degree program and to maintaining focus on one's graduate research. Advisor approval is crucial at various steps of progressing through the program.

Graduate Committee

The graduate committee serves to support the student in his or her academic goals and research objectives and to uphold the standards and practices of the University.

The graduate committee for thesis and professional paper tracks consist of at least three faculty members: The advisor serves as the chair of the graduate committee. The second or 'inside member' is another Geography faculty member. The third or 'outside member' is a faculty member from a different department, typically with expertise in the

research topic of the thesis or professional paper. There may be additional members. The graduate committee provides suggestions and approval of the (1) course of study; (2) the thesis, or the professional paper proposal; (3) the thesis or professional paper; and (4) the defense.

The graduate committee of students opting for the non-thesis track is made up of the advisor, who chairs the committee, and another Geography faculty member. There may be additional members. The committee (1) provides suggestions and approval of the course of study; (2) reviews the portfolio; and (3) conducts written and oral comprehensive exams.

New Student Orientation

At the beginning of the Fall Semester, all entering graduate students are required to attend the Department's Orientation. The Orientation is held on campus and includes a briefing on departmental organization, policies relevant to graduate students, and other pertinent information. This may be a separate event held before classes begin or built into the first meeting/session of the Geography Colloquium GPHY 500.

RESEARCH PLANNING, & ASSESSING STUDENT PROGRESS

Planning for a successful graduate education starts with the admission. Students apply for admission to one of our graduate programs: MA, MS, MS with option in Community and Environmental Planning CEP or MS with option in Cartography and GIS CGIS. Students in the MS options (CEP and CGIS) often determine at the onset of their degree whether they will pursue the thesis track, the professional paper track or the non-thesis track. Students in the options must commit no later than the end of the first semester to the track they will pursue: thesis, professional paper or non-thesis.

All students will be reviewed for the progress they make toward their degree. Graduate students are expected to receive grades of B or better in their course work and show progress in their research. In the review process, the Department will take into account feedback from advisor and instructors. Communication of the student with the advisor is crucial in conveying the progress made. The Department pays particularly careful attention to the review of provisionally admitted students. It is expected that provisional status will change to full status at the end of the first semester. There may be circumstances for students to be granted a second semester of provisional status. If the conversion from provisional to full is not warranted after two semesters, the student will leave the program.

Teaching Assistants undergo a review that includes 1) their performance as a TA, and 2) their academic performance and progress made toward their degree. Both must be

satisfactory for renewal of the TAs. TAs are expected to pursue a Thesis or Professional Paper track.

Research planning is particularly relevant for students who will write a thesis or a professional paper. The timeline below offers guidance on starting this process early. It also shows that graduate research is an on-going process of a graduate program.

Approximate Timeline for Thesis or Professional Paper Completion (Two-Year Plan)

| Stage | Description | Time |
|---|--|-----------|
| 1. Initial idea development. | Enroll in GPHY 504 Introduction to Geographical Research and/or GPHY 505 Research Design. Consult with various professors about research ideas and examine previous theses for guidance. Research prospectus due by the end of the first semester | ~1-4 mo. |
| 2. Background research and preparation | Methodology should be carefully researched as well as the nature and background of the problem itself. Methodological approaches to the analysis and synthesis should be pondered at this early point. | ~3-12 mo. |
| 3. Drafting of a Proposal | To be undertaken in tandem with GPHY 505. Choose a recent digital version of a thesis early on so that you have a Table of Contents, Headings, and carefully considered structure from the beginning. Get used to hyperlinking figures, tables, and headings as these will be needed in the final document. | ~2-4 mo. |
| 4. Proposal review & revisions with Chair | Plan on at least 3 drafts, possibly more. If a long delay takes place or a major change is made in the project, this step may need to be revisited. This Proposal provides the framework for the thesis or professional paper. | ~2-4 mo. |
| 5. Finding the Committee | This may evolve over time, but the committee should be carefully chosen by the student and Advisor/Committee Chair. The student MUST consult with his/her Chair BEFORE asking anyone to serve on the Committee. You should formally ask each member in person. In some cases, the person may ask to see a copy of your proposal before he/she agrees to serve. This is more common for the person serving as the Outside Member. Some faculty may agree to serve on a committee only if they know a student from a course. The Committee should be formed during the second semester. | NA |
| 6. Presentation of Proposal to Committee | This involves giving the final draft of your proposal that has been approved by your advisor to the other Committee members to read at least two or more weeks ahead of a meeting. Generally the student gives a short 20-30 minute overview of the proposal and then answers questions from the Committee. This is meant to be a constructive, interactive discussion that helps the Committee understand the scope of the thesis, how it is situated in relation to other work in the area, and any constraints of the data. It is also meant to further the student's understanding of those same issues, but also some of the pitfalls or cautions that the Committee foresees as being potential research challenges. Students should take careful notes of suggestions and questions. The proposal should be presented toward the end of the second semester | ~ 1 mo. |

| | | |
|----------------------------------|---|----------------------|
| 7. Further Preparations | Perhaps more refinement of background literature review, methods, planning for field work; identifying sources of secondary data (i.e., GIS layers, etc). Your literature review should be almost fully developed and complete by this point. | ~1-2 mo. |
| 8. Data Preparation or Gathering | The time spent in the field, doing interviews, taking measurements, generating data, preparing or cleaning/coding/manipulating data, etc. Notes about where each piece of data was generated and manipulated will be critical to any later revisions. Depending on the nature of the field or other data: summer can be a good time for data gathering. | Summer? |
| 9. Analysis | This could be statistical analysis, GIS analysis, qualitative data analysis, policy assessment, etc. This provides the results of the research process. Writing the methodology section of the thesis (using the proposal as a guide) as the student is doing the analysis can serve to document the process and save time later in trying to reconstruct the sequence of steps. Consultation with the Chair (and potentially the Committee) during this time is very important to make sure that questions and decisions are made that do not reduce the quality of the thesis. This is typically done during the third semester. | ~3-12 mo. |
| 10. Synthesis | The most intellectually lucrative portion of the process. After the results have been generated, it is necessary to go back and evaluate these to see how they reflect on the initial question. Do the results support or reject the hypothesis? It is rarely a yes or no answer. How do these results inform, confirm, or contradict the literature? What are the theoretical, methodological or empirical contributions of this work? Carefully consult with your Chair as to how much inference can be drawn from the data analysis. Discuss these thoughts with your Committee as needed. Toward the later part of the third semester (December) or at least one semester before graduation, the Application for Graduation Form and graduation fees must be submitted to the Graduate School | Allow at least 1 mo. |

| | | |
|--|---|---|
| <p>11. Writing (intensive)</p> | <p>The process of carefully conveying the purpose, background, methods, results, and findings of the thesis. This is a scientific, publically available document that should be formal, precise, with each word carefully chosen. Formatting, grammar, punctuation, etc. should all be considered while the writing occurs. Refer often to the Table of Contents to assist with knowing what information needs to be conveyed in each section to avoid redundancy but include all the necessary information.</p> <p>While writing starts with the proposal and occurs throughout, this intensive writing phase can benefit from uninterrupted time: the winter break is a good time to immerse in writing.</p> <p>Students may share with critical readers unfamiliar with the work to check for clarity and logic. Before passing on to the Chair, students need to carefully review the document for correct grammar. Some may benefit from enlisting an editor or consulting the UM Writing Center.</p> | <p>Depends on how much was written during earlier stages...</p> <p>~1-4 mo.</p> |
| <p>12. Thesis review and revision and revision and..</p> | <p>The review of the thesis draft by the Chair could occur on a chapter-by-chapter basis, or as drafts of the entire document depending on their preference and needs of the student. However, a large document such as this takes time to read and review. Plan on at least 3 iterations of review and revision. Initial reviews tend to be largely structural to be sure that everything is included and properly ordered. Additional work may be needed on the analysis portion that requires returning to steps 9-11. Grammar, phrasing, and formatting need to be addressed throughout.</p> <p>This occurs during the fourth semester. The Chair should have a first full draft no later than the end of February.</p> | <p>~2-4 weeks per revision</p> |
| <p>13. Presentation of the Thesis to the Committee</p> | <p>Revised drafts, approved by the Chair, will be sent to the Committee, typically on or before mid-April.</p> <p>Communicate with Committee members about their preferences for a hard copy or digital copy (or both)</p> <p>Generally, a Committee Member is to have 2-3 weeks or more to review the document. Once the Committee agrees that the thesis is “defendable” a defense can be scheduled.</p> | <p>~2-4 weeks</p> |
| <p>14. Thesis Defense</p> | <p>No later than first half of fourth semester.</p> <p>The thesis defense entails a formal, public oral presentation to students, faculty and members of the public. The presentation typically is 30-45 minutes with additional time allotted for questions from the public and Committee. The order and depth of the questioning, and whether the public is permitted to stay for the entirety of the oral examination, depends on the preferences of the Committee (usually the Chair). Traditionally, after the final question, the student is sent from the room while the Committee evaluates the work. Three outcomes are possible: pass without condition, pass with conditions (ranging from minor edits to major revision, another defense, and even additional course work), or failure without additional redress.</p> | <p>Usually give public notice of 2 weeks</p> |

| | | |
|-----------------------------|---|---------------------------|
| 15. Revisions and Paperwork | Even the best theses require revisions (perhaps grammatical, formatting or modest structural changes based on comments from the Committee). In some cases these can be substantial. This is the last opportunity to perfect the text and formatting to conform to Graduate School standards. Several forms must be completed and signed by the Committee Chair. | ~2 weeks – several months |
| 16. Submission | Converting the digital file and printing the final documents and paperwork to go to the Graduate School, Department, and Library and then conferral of degree. | 1 week |

FACILITIES, COMMUNICATION, CAMPUS & PROFESSIONAL COMMUNITY

Geography Computer Labs

The Department’s Geospatial Research and Teaching (GReaT) computer labs are located in Stone Hall 218 and 219. They provide computers for your class and research needs. A wide array of software is available for quantitative and qualitative analysis, including ArcGIS, Idrisi, ENVI, Erdas, TransCad, Golden Software products, SPSS, NVivo, a variety of other GIS packages, and the Adobe Creative Suite. Not every machine will have all of the software due to licensing issues. A listing of current software available in each lab and each machine is updated shortly after the beginning of each semester and posted near the front door to each lab.

At the beginning of the fall semester, Geography’s Administrative Assistant will send a list of all grad student ID numbers to the Griz Card Center. The Center will activate your card to enable access to the geography computer labs via the entrance to Stone 219. Your card will provide you with 24-7 access to Stone 219 throughout your entire time in the graduate program, including summer and breaks. Undergrads have more restricted access.

To access the lab, just swipe your card through the reader outside the Stone 219 door, pull the door back, and enter. Note: If you hold the door open for longer than 90 seconds, an alarm will sound at the UM Office of Public Safety, and you may soon be confronted with law enforcement officials. This is a security precaution to dissuade computer theft.

Geography Listserv

Signing up for the Geography Listserv at the beginning of the semester will put you on the Department’s mailing list. Campus events, news, job opportunities, regulation changes, and other important information related to the Geography Department is announced on the listserv. To sign up for the listserv, send an email to GEOGRAPHY-subscribe-request@LISTS.UMT.EDU. Leave the subject line blank. In the body of the e-mail,

type: "Subscribe [your name] Geography." After submitting the e-mail, you'll receive a confirmation e-mail. Angie Melton-Paisley administers the listserv.

Please note: a 'reply' to a Listserv announcement will go to the entire list. Be judicious and courteous in your use of the listserv.

Geography Club and Gamma Theta Upsilon

The Geography Club is a student-run organization that provides opportunities for socializing and geography-specific interactions with fellow students and peers outside of class. Membership includes both graduate and undergraduate students and often reflects the personalities, interests, and level of engagement of those involved. Any geography major is welcome to participate in club activities. Announcements for the student-run Geography Club are often sent via the Listserv.

Club events have involved things like barbecues, group campouts, bike rides, on-campus movie screenings, guest speaker presentations, and group hikes. The Geography Club typically takes the lead in organizing the annual Geography Picnic at the beginning and end of the academic year.

Gamma Theta Upsilon (GTU) is an international honors society in geography, and our department proudly serves as the host to the local chapter. Our GTU chapter activities support geographic knowledge and awareness in a variety of ways. Each spring, students with a qualifying GPA receive an invitation to join. Besides an initiation fee, there are no additional member fees. It is an honor to be a society member, and there are a variety of benefits associated with membership (<http://www.gammathetaupsilon.org>).

UM's Graduate Student Association and Other Groups

The Graduate Student Association occasionally hosts events and generally fosters communication between graduate students campus wide. For more information, check out the [UM Graduate Student Association's website](#). UM is full of welcoming campus groups. A listing of available campus groups is available at http://life.umt.edu/asum/student_groups/student_group_listing.php.

Scholarly and Professional Meeting Participation

Graduate students are strongly encouraged to present their research at least once at a scholarly or professional meeting. For Geographers one of the most productive and exciting venues is the Annual Meeting of the Association of American Geographers (AAG) (see <http://www.aag.org>). Cartographers may strive to attend the North American Cartographic Information Society (NACIS) meeting (for details see <http://www.nacis.org>).

Regional meetings include the MAGIP or MAP (please see above about scholarships) or the Great Plains/Rocky Mountain meeting of the AAG.

The Department is generally able to provide \$100 to students who present a research paper or scientific poster at an out-of-town conference with expenses not covered by other sources. There is a University-wide lottery for graduate student travel. For more information visit this website: <http://www.umt.edu/provost/students/stf/default.php>

Additionally, there are a broad range of scholarships and fellowships designed for specific research purposes, which may include conference travel, for instance the Pat Williams Public Policy and Leadership Initiative. (A host of funding opportunities will be discussed in GPHY 504 and GPHY505.)

The University of Montana hosts the interdisciplinary UM Graduate Student Research Conference in mid-April <http://scholarworks.umt.edu/gsrc/>. This one day event creates a space for graduate students to present their research in the form of oral presentations and posters. Outside visitors can view the work, projects are judged, and prizes are awarded. You might consider presenting one or more of your semester-long projects or thesis research at the conference. The Conference provides great opportunities for you to meet fellow grad students and make valuable connections with UM faculty members from outside the Geography Department. Importantly, GSRC adds to your Curriculum Vitae and provides excellent professional development. .

APPENDIX

Geography MA and MS Non-thesis Track: Portfolio and Comprehensive Examination Guidelines

Other than required coursework, there are three components of the non-thesis track corresponding to the Cartography & GIS and the Community & Environmental Planning Options. These include:

1) The preparation of a **portfolio containing significant professional works** by the M.S. candidate (e.g., reports, research papers, posters, proposals, etc., drawn from graduate coursework, internship activities, and/or actual professional activity completed while in residence) to be reviewed by an **examination committee**. Typically early in the **semester before** the student intends to graduate, she/he consults with the advisor about the ideal content of the portfolio. The portfolio must include an introductory preamble that discusses how the works contained in the portfolio are significant to the career aspirations of the candidate, and a curriculum vitae, and must be identified and prepared for dissemination to the committee by the start of the semester in which the candidate intends to graduate. The examination committee reviewing the portfolio will be composed of two Geography Department faculty members (the candidate's advisor and another person), and may additionally include a faculty member from another department or unit on campus or other appropriately qualified individual (this will be decided by the advisor and candidate in advance).

2) A **written examination** consisting of approximately four questions coming from the examination committee. The candidate and the advisor, who will chair the committee, will determine in advance the **format** of the written examination (i.e., take-home & open-book, or closed-book and administered in the Department). The amount of **time** given to the candidate for the preparation of responses to the questions will depend on the format (i.e., approximately one week for open-book examinations, approximately two four- to eight-hour days for closed-book examinations). The committee members will review the written responses to the questions to determine if the candidate can progress to the next phase.

3) An **oral examination** in which the candidate and examination committee discuss the written examination and in which the candidate discusses the significance of the professional works of the portfolio (No. 1 above). The committee will then meet in private to discuss whether the candidate has passed the comprehensive examination.

Note: Because the comprehensive examination represents a significant undertaking on the part of the candidate and the committee, it is important that the candidate must submit the significant professional work by the start of the semester in which she/he intends to graduate. She/he must plan for scheduling written and oral examinations so that they are completed prior to finals week of that semester.