



DEPARTMENT OF GEOGRAPHY GRADUATE PROGRAM RULES & PROCEDURES

updated Fall 2006

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The purpose of this document is to set forth the departmental rules and procedures governing graduate students in Geography, including the degree requirements for the MA, MS and PhD degrees, the advisement procedures, and other rules and regulations concerning the graduate program. The Director of Graduate Studies is the faculty member responsible for the administration of the rules and policies contained in this document.

In addition to these rules and procedures, all students and faculty are responsible for becoming familiar with the Graduate School Policies and Procedures at <http://www.grad.buffalo.edu/policies/index.php>. The requirements of the Department may, in some cases, be different from the minimum degree requirements set by the Graduate School. In such cases the departmental requirements supersede the requirements of the Graduate School.

I. Admission to the Graduate Program

Applicants for graduate study in Geography must submit a formal application online at <http://www.gradmit.buffalo.edu>. All required materials should be send to: Director of Graduate Studies, Department of Geography, State University of New York at Buffalo, 105 Wilkeson Quadrangle, Buffalo, NY 14261-0023

Applications are accepted on a rolling basis. Deadlines for students requesting funding consideration are outlined in section II

A completed application consists of the following:

1. online application
2. \$50.00 application fee
3. official copies of all undergraduate and previous graduate study transcripts
4. original score report of the Graduate Record Examination (GRE) or, for applications to the ITC program, scores from the Graduate Management Admission Test (GMAT)
5. three letters of recommendation, preferably on the departmental recommendation form
6. a statement of purpose essay, no longer than two typed pages, stating the reasons for desiring to undertake graduate study in Geography
7. International applicants only -Scores on the Test of English as a Foreign Language (TOEFL) if the applicant is from a country where English is not the primary language of instruction. All

applicants must meet the minimum required score of 550 paper, 213 computer or 79 iBT. The test date must be less than two years old.

8. International applicants only - A confidential Statement of Finances

Only completed applications are reviewed by the Graduate Committee. Admission to the Masters program is made by the Graduate Committee in consultation, if necessary, with the appropriate faculty. Applications for the PhD program are reviewed by the Graduate Committee and by at least one faculty member who is in the area of specialty identified by the applicant. The Committee then forwards its recommendation and the name of the faculty member who is willing to act as the student's tentative Major Professor to the faculty as a whole for consideration. (Note: An applicant to the PhD program cannot be admitted unless a faculty member is willing to act as the student's tentative Major Professor.) If any objection is raised within five days by the faculty, or if the Graduate Committee vote is not unanimous, the matter will be referred to the faculty as a whole for a decision. Otherwise, the decision of the Committee will be final.

In the event that a majority of the voting faculty cannot be convened in a timely manner, such as during the summer, the Graduate Committee or the Director of Graduate Studies and the Chairperson may grant admission to any graduate program, and may award financial assistantships. Admission to the MA program does not imply admission into the PhD program.

II. Financial Assistance

Eligibility

Any Geography graduate student may request to be considered for financial assistance. Decisions on financial awards are made by the Department as a whole with recommendation from the Graduate Committee. The student's composite academic record and previous assistantship performance, if any, will be used for the evaluation. Candidates for university-wide fellowships are also evaluated by a university committee. Granting of financial assistance is for the term specified in the offer letter and does not imply financial assistance for any other term .

- ❖ Applicants seeking funding consideration must submit a complete application by **April 1** for Fall admission and by **October 1** for Spring admission.
- ❖ Applicants with superior grades and GRE-GMAT scores are candidates for special university-wide fellowships and should have their application completed by about **January 10**.
- ❖ Current students wishing to be considered for funding may submit a Departmental funding application. Deadlines will be announced internally.

Criteria for evaluating applications for financial assistance are as follows:

- Academic performance: academic work at other institutions, past and current work at UB, performance scores on the GRE or GMAT exam, and evaluations by referees.
- Student's skills and previous experience to fit Department need
- International Students – TOEFL and SPEAK scores.

Work Requirements

The normal workload of graduate assistants should not exceed 20 hours per week. The type of work is determined by either the faculty member to whom the assistant is assigned or by the Director of Graduate Studies. Normally, students assist in assembling bibliographies, grading, proctoring examinations, conducting laboratory sections, maintaining Department laboratory facilities, and assisting faculty in

research. In addition, doctoral students are required to gain experience through classroom instruction. After initial assignment by the Director of Graduate Studies, the faculty supervisor is responsible for defining the duties to be performed, scheduling the hours to be worked, and evaluating the student's performance. All TA/GA positions are responsible for occasional proctoring. Other faculty shall not give direct assignments to student assistants, but shall make their requirements known to the Director of Graduate Studies who shall make any necessary reassignments. If the faculty supervisor is dissatisfied with the assistant's performance, or if the student feels that the work he/she has been assigned is inappropriate or excessive, appeal may be made to the Director of Graduate Studies for review.

Criteria for Continued Eligibility

A student will be considered as having received financial support from the Department if he/she is awarded a graduate assistantship or fellowship from moneys allocated to the Department by the Dean of Graduate School. Support moneys awarded for summer sessions and funds made available from research grants do not affect the eligibility of a student for funding during the regular academic year. Students may not receive departmental support while they are receiving support from research grants. All assistantships funded from research grant moneys are awarded by the principal investigator of the grant. All conditions of work are to be handled by the principal investigator and the student. The departmental rules and regulations regarding assistantship support do not apply to grant moneys, with the exception that student workload shall not exceed 20 hours per week and shall not hinder the student's progress toward his/her degree.

All financial awards are made for one semester or one academic year and the duration of the award will be clearly stated in the student's offer letter. However, the granting of financial assistance to a student for a certain period of time in no way guarantees the student of further financial assistance after the period of the award has terminated. Awards will normally be limited to **eight** semesters for doctoral candidates and **two** semesters for Masters candidates. Tuition waivers associated with TA/GA stipends are limited to 72 credit hours.

These time limits include all assistantship appointments at UB from date of entrance to the Graduate School. Beyond these limits, students may receive assistantships funded from research grants; however, tuition scholarships for such appointments must be approved by the Graduate School. Students are cautioned that financial exigencies may limit the use of tuition scholarships.

In addition, Master's students who are conditionally accepted as doctoral students during the first year of their graduate study may receive funding during the second year of residence. (Such conditional acceptance would occur when MA students are granted permission to enter the PhD program pending completion of their MA degrees).

Special requests for additional financial support may be made by any PhD student before February 1st of his/her fourth year of support. To request an additional year of financial assistance, a PhD student must submit to the Director of Graduate Studies the following information:

1. Evidence that an application for external (i.e., to funding sources other than the Department) support moneys has been made and subsequently rejected;
2. Written statements from the Chairperson of the Student's Supervisory Committee assessing the progress being made by the student toward completion of the degree program and explaining why an extension of financial assistance for an additional year is necessary.

Upon receipt of this information, the Director of Graduate Studies must present the request to the Department faculty. An additional year of financial assistance may be extended to a PhD student if a majority of the voting faculty is convinced that adequate efforts have been made by the student to secure outside funding, that the student is making satisfactory progress toward the completion of degree, that an

additional year of financial support is necessary to complete the program, and that the moneys allocated to the Department for student support are sufficient to fund the request.

Once funded, a student may apply for renewal subject to the normal time limits as set forth in this document if:

1. The student's advisor indicates in writing that he/she is making satisfactory progress toward completion of the degree;
2. The faculty member to whom the student has been assigned indicates in writing that the student's job performance has been satisfactory; and
3. The amount of moneys available to the Department for assistantship or fellowship awards remains adequate.

Termination of Financial Assistance

Any financial assistance awarded to a graduate student from moneys allocated to the Department by the Dean or the Graduate School may be terminated at any time if the student's job performance is not satisfactory. In such a case the student's supervisor will notify the Director of Graduate Studies that the student's performance is unsatisfactory and will indicate why the performance is unsatisfactory.

The Director of Graduate studies shall notify the student in writing that his/her performance is unsatisfactory. The Director of Graduate Studies will consult with the student and may:

1. Continue assistance upon reaching a satisfactory understanding between the student and his/her supervisor;
2. Assign the student other duties and a new supervisor; or
3. Terminate the student's appointment after receiving support for such action by a majority vote of the faculty.

The Director of Graduate Studies shall issue a written statement to the student and his/her supervisor reporting the decision. If the student has been terminated, he/she may file an appeal by forwarding a letter to the Director of Graduate Studies within fourteen days of his/her receipt of the notice of termination. The Director of Graduate Studies shall present the case to the Faculty as a whole for adjudication. The student's assistantship or fellowship can be reinstated by a majority of the voting faculty.

III. Departmental Degree Requirements

Most Graduate students (except those enrolled in the Master's ITC program) will be required to take:

- GEO 500 - Introduction to Geography Graduate Study
- GEO 501 - Research design
- GEO 505 - Univariate Statistics in Geography

These courses should be taken during the first year of graduate residence. Students who feel they have completed a comparable course may seek a waiver from the instructor of said course. A grade of B- or greater is required to have a waiver considered. All waivers should be secured during the student's first semester. It is the responsibility of the instructor to determine whether the student has satisfactorily completed an equivalent course. The student's supervisor will determine whether any additional work will be required.

For requirements specific to each specialization, please see www.geog.buffalo.edu.

Master of Arts Degree

The MA program in Geography is designed primarily to prepare students for careers in government, business or education, and to provide a firm theoretical and methodological foundation for those who wish to continue in a doctoral program. The career-oriented MA program provides the opportunity for students to gain a strong background in both the theoretical and applied aspects of Geography with special emphasis on Geography in relation to currently recognized societal problems. Specific areas of study are as follows: (1) urban and regional analysis; (2) earth systems science: biogeography and ecosystems, soils, fluvial processes, and geomorphology; (3) geographical information systems and computer cartography; and (4) world trade and international business. **For students not specializing in any one area, Geo 500, 501 and 505 are mandatory.**

The MA degree requires 30 credits of course work. The International Trade Concentration (ITC) requires 39 credits. Each student must also complete a Master's project or portfolio. Up to 6 credits of project guidance (GEO 631) may be included in the degree requirements.

The selection of an area of concentration is made by the student in consultation with his/her advisor, and is subject to the provisions that adequate courses exist in the Department or University, and that there is a faculty member in the Department who is willing to work with the student in the topic area selected.

The following rules apply for all MA degree projects:*

1. The project may be completed by one student or by a team of two or three students. If the project is a team effort, the magnitude of the common venture should significantly exceed that which would be undertaken by one individual.
2. If the project is a joint effort, the team may include students who are: a) not using the particular project to meet their own project or dissertation requirements; b) enrolled in a different degree program within the Department; c) graduate students in a department other than Geography. Such students shall register under GEO 534, Graduate Research Problems.
3. A two-person committee must be formed to supervise the project. The project Chairperson and one other member of the Project Committee must be members of the Department of Geography and Faculty of the Graduate School. A third person may become a member of the Committee. This person does not have to be from the University faculty; however, he/she must have special knowledge or competence in the subject area of the project. The Committee has sole responsibility for directing and approving the project.
4. Students must consult with their major professors to establish a schedule for reading and revising drafts of their project.
5. A permanent copy of the completed project must be presented to the Department in a bound form that conforms to departmental standards.

*For ITC students the project is part of GEO 741 (Geography Internship and Research Project).

Master of Science Degree

The M.S. is intended for students who desire to specialize in applications of analytical techniques in the field of geography. Students are trained in advanced information technologies such as geographic information systems, remote sensing, statistical and mathematical modeling, geocomputational models, network and spatial analysis, and quantifying and modeling environmental processes. The degree is aimed at students who want to pursue a career in research, development, and consulting in private and public organizations or plan to pursue a doctoral degree in analytical Geography or Geographic Information

Science.

Students admitted to the program are expected to show proficiency in the following areas: calculus, univariate and multivariate statistics, and introductory GIS at the time of admission. Students who do not meet the minimum qualifications are advised to make up deficiencies before entering the M.S. program. M.A. students have the opportunity to be subsequently admitted to the M.S. program.

The M.S. program consists of 36 credit hours. A minimum B grade is required in each course applied toward the program requirements. There are three academic concentrations in which to specialize: Geographic Information Systems and Science, Transportation Science and Business Geographics, and Environmental and Earth Systems Sciences. **For requirements specific to the MS degree, please see www.geog.buffalo.edu.**

To obtain the M.S. degree, all students must complete a thesis. A proposal of the research to be conducted must be submitted to the **advisory** committee. This proposal must be defended and approved by the committee before the research can be undertaken. After submission of the thesis, an oral defense must be scheduled and attended by the committee.

All courses that will be part of this M.S. program are currently offered within the Department of Geography or other UB departments. The integrity of the M.S. Program will be under the responsibility of the M.S. **Program Committee** to be composed of three Geography Department faculty members representing each of the three curricular tracks offered through the M.S. Program. The M.S. Program Committee will hold ultimate responsibility for approving electives and the entire program of study of each student enrolled in the M.S. Program.

Each MS student is required to have a Supervisory Committee as follows:

1. A Faculty member or adjunct member of the Geography Department who serves as the student's advisor and as Chair of the Committee;
2. Two additional members of the UB Graduate faculty, at least one of whom must be a member or adjunct member of the Geography Department;

A permanent copy of the completed thesis must be presented to the Department in a bound form that conforms to departmental standards and an electronic submission as outlined in the Grad School Policies and Procedures.

Doctor of Philosophy Program

Admission to the PhD program in Geography normally requires a Master's degree in Geography or a field appropriate to the pursuit of the PhD in Geography. The Department may admit students with only a bachelor's degree directly into the doctoral program. Such individuals may subsequently petition the Graduate Committee for transfer to a terminal Master's degree. The transfer is accomplished upon approval by the Committee and upon submission of a revised Application to Candidacy. Students must then complete the normal requirements for the Master's degree.

A minimum of **twelve** hours of course work must be taken in fields other than Geography.

Each student must develop a technical skill appropriate to his/her proposed program of study. This skill will be determined in consultation with the student's Major Professor and Supervisory Committee, and shall be

met by the satisfactory completion of two courses. The courses may be in such disciplines as mathematics, statistics, computer science, economics, engineering, and foreign language, and will ordinarily be at the graduate level.

Students must consult with their major professors to establish a schedule for reading and revising drafts of their dissertations.

Most graduate students who enter the doctoral program without a Master's degree are required to enroll in GEO 500, 501, and 505 the first semester they are offered after the student matriculates. Students should consult with their advisor if they feel they are eligible to have any of these waived. **Specific course requirements for each specialization can be found on our web page at: <http://www.geog.buffalo.edu/>**

Doctoral Examinations and Defenses

Successful completion of the PhD program requires four steps as follows:

1. Diagnostic Examination: This examination is normally taken before the beginning of the third semester of full-time residency and prior to the preliminary examination.
2. Preliminary Examination: This examination is taken when formal course requirements have been met (which is usually toward the end of the second year).
3. Defense of the Dissertation Proposal; and
4. Dissertation Defense.
5. Responsible Conduct of Research Training Requirement

Responsible Conduct of Research (RCR) Training Requirement

All students initially admitted to a Ph.D. program for the Fall 2009 semester or thereafter are required to document successful completion of "Responsible Conduct of Research" (RCR) training when they submit their Application to Candidacy (ATC) for their Ph.D. degree. This training requirement may be fulfilled by either (1.) enrolling in and passing PHI 640 *Graduate Research Ethics* or RPN 541 *Ethics and Conduct of Research* or (2.) completing the Collaborative Institutional Training Initiative (CITI) online Responsible Conduct of Research course with an average score of 80% or higher. Students opting to complete the CITI online course must supply documentation of its successful completion with their Application to Candidacy <http://www.grad.buffalo.edu/policies/phd.php#conduct> .

The Supervisory Committee evaluates the student's performance on all examinations. A pass or fail mark on all examinations is determined by a majority vote of the Committee.

Each PhD student is required to have a Supervisory Committee as follows:

1. A Faculty member or adjunct member of the Geography Department who serves as the student's advisor and as Chair of the Committee;
2. Two additional members of the UB Graduate faculty, at least one of whom must be a member or adjunct member of the Geography Department;
3. Additional faculty members as appropriate (optional).

In addition, each PhD student is required to have an outside reader who holds a faculty position and whose primary appointment is outside the Geography Department. Adjunct Faculty of the Geography Department may serve as a student's outside reader provided they are not serving as one of the three core members of that student's Supervisory Committee. The role of the outside reader will be determined by the Supervisory

Committee Chair.

All geography faculty are welcome to attend all PhD oral examinations, proposals, and defenses, and may take part in the oral questioning; however, only members of the students' Supervisory Committees may vote. In addition, students are welcome to attend the oral presentations of dissertation proposals and the public defenses of completed dissertations. All doctoral examinations and defenses are to be scheduled by the Chairpersons of the Supervisory Committee and announced in advance to the Department.

Diagnostic Examination

The scope and contents of this examination are to be determined in advance by the Supervisory Committee in consultation with the student. This Examination, whose primary purpose is to determine areas in which additional work is necessary, consists of written responses to questions set by the Committee and an oral examination by the Committee.

The Diagnostic Examination for students who begin their graduate work at the University of Buffalo in the PhD program must normally be held within one month of the end of the second semester in the PhD program. Students proceeding to the PhD directly from the Master's program at this University must normally complete the Diagnostic Examination within one month of the end of the third semester of graduate work at this University, regardless of the status of their Master's programs.

Students who cannot meet this schedule must petition in writing the Director of Graduate Studies at least one month before the above deadlines, citing the reason(s) for the delay and stating the proposed alternative date for the examination. Students who fail to follow this time schedule and procedure will be placed on probation and will be allowed four weeks to take the Diagnostic Exam. Failure to meet the condition of probation will result in a declaration by the Graduate Committee that the student is not in good standing.

A student taking the Diagnostic Examination will be awarded one of two "grades" by his/her Supervisory Committee:

- a. Pass. A pass on the Diagnostic Exam means that the Supervisory Committee believes that the student, upon completion of his/her coursework, is eligible to take the Preliminary Exam.
- b. Conditional Pass. A conditional pass means that the Supervisory Committee believes that the student exhibited certain weaknesses. The Supervisory Committee is obliged to inform the student how he/she could remedy the deficiencies by either taking formal courses, or doing specialized tutorial work with the members of the faculty.

The grade will be determined by the Committee immediately following the Examination and will be based on both the student's performance on the Examination and his/her course work. Within seven days of the Examination the Chairperson of the Supervisory Committee must inform the student in writing of the grade achieved and the nature of any prescribed remedial work and/or reexamination. A copy of this correspondence will also be placed in the students file. In case of a conditional pass, the student's Major Advisor should certify in writing to the Director of Graduate Studies that all conditions set by the Supervisory Committee have been met before scheduling the Preliminary Examination.

Preliminary Examination

After successfully completing the Diagnostic Examination, each PhD student must successfully pass the Preliminary Examination. The Preliminary Examination focuses on the general area of specialization in which the student is conducting his/her graduate studies. The Examination must include an oral component. The Committee may require a written component. A written component will normally be required when a student obtains a Conditional Pass in the Diagnostic Examination.

A pass or fail mark on the Examination is determined by a majority vote of the members of the Supervisory Committee, all of whom must be present during the entire oral component of the Examination. The Committee Chairperson will inform the student and the Director of Graduate Studies of the outcome of the voting immediately following the completion of the oral component of the Examination.

Unsatisfactory performance on the Preliminary Examination may be rectified by re-examination after a minimum interval of three months but no later than by the end of the semester following the one in which the student first took the examination. A student may take the Preliminary Examination only twice.

Approval of the Dissertation Proposal

The Dissertation Proposal is written as well as oral. The written version of the Proposal is to be made available for the Department to inspect one week prior to the oral presentation. The oral presentation is made to the Supervisory Committee and is open to the Department. The proposal must receive a favorable vote from a majority of the Supervisory Committee to be considered acceptable. The student is to be informed of the outcome of the vote by the Committee Chairperson immediately following the oral presentation.

Dissertation Defense

Upon completion of the dissertation, the PhD candidate must give an oral public defense of his/her findings. The outside reader will be selected by the Chair of The Committee and be knowledgeable in the student's area of specialization, be familiar with the nature of university research, and have had previous experience in directing or supervising research. Following the presentation, the members of the Supervisory Committee will rule on the acceptability of the dissertation and the defense. The defense is acceptable if a majority of the Committee, including the Chairperson, so state by signing the appropriate Graduate School M form. The student is to be notified of the ruling by the Committee Chairperson immediately following the defense and the Committee's deliberation.

IV. Advisement and Program Approval

It is the responsibility of every Geography graduate student to develop and obtain approval for his/her graduate program. The graduate program identifies all courses, independent study, project, and any other activities that are to be counted toward the fulfillment of the degree requirements. The Director of Graduate Studies shall appoint a temporary advisor for all entering students. The temporary advisor will suggest one or more members of the Geography faculty as a potential permanent advisor for the student. The student is encouraged to obtain a permanent advisor during their first semester. If a student desires to change his/her permanent advisor, the student should consult with the Director of Graduate Studies.

Course Selection and Approval

It is the responsibility of each graduate student to consult with his/her advisor at the beginning of each semester to determine the appropriate set of courses. If, for any reason, the advisor is unavailable, the student should see the Director of Graduate Studies. In addition, at the beginning of each semester every graduate student must submit the **Graduate Student Advisement Form and the Graduate Student Progress Form**. Final approval of the specific courses that may be applied toward a student's degree is reserved for the student's major professor in consultation with the student's committee.

Program Development

The Graduate School requires all graduate students to submit an Application to Candidacy for review and approval. This form (<http://www.grad.buffalo.edu/forms/index.php>) is completed by the student, reviewed

and approved by the student's advisor, committee member(s) and the Director of Graduate Studies. For Masters students, an approved Application to Candidacy must be filed with the Graduate School during the semester prior to the semester in which the student expects to graduate and doctoral students must file an approved Application to Candidacy two semesters prior to graduation.

Supervised Teaching and Applied Skills Supervision

All graduate teaching assistants and regular graduate assistants may register for one or both of the following courses when assistantship assignments so warrant:

- a) Supervised Teaching (GEO 601). This course may be taken by all TA/GAs who have full or partial responsibilities for teaching a course or laboratory section. Each TA/GA will be assigned to a faculty member who will regularly oversee the teaching activities of the graduate student.
- b) Applied Skills Supervision (GEO 699). This "course" may be taken by those TA's and GA's who are working on individual assignments under faculty supervision. Examples of such activities include research design, laboratory/ practicum techniques and experiences, and the acquisition of library/writing/editing skills.

Authorship Credits

In cases where students and faculty generate joint publications, the order of authorship is to be worked out by the respective persons involved. It is the policy of the Department to include students as co-authors in every case where the student has made a substantial contribution to the publication.

Appeals

Any student has the right to appeal any action taken pursuant to this document. Appeals shall be made first to the Department as a whole and a majority of the voting faculty will determine the Department's decision. Further appeal shall be in accordance with the University's procedures.