# GRADUATE STUDENT HANDBOOK

2024-2025

# GEOGRAPHY AND ENVIRONMENTAL SYSTEMS GRADUATE HANDBOOK 2024-2025

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# 1. INTRODUCTION

# A. Graduate Program Committee

The Graduate Program Committee (GPC) is dedicated to advancing the aims of the Graduate Program for all graduate students. The committee is comprised of the Graduate Program Director (GPD), four other faculty members to represent the department's specializations. In addition, the Department Chair serves as an ex-officio (non-voting) member.

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

# For the 2023-24 academic year, the GPC is:

- David Lansing (GPD)
- Dawn Biehler
- Chris Swan
- Dillon Mahmoudi
- Charles Ichoku
- Maggie Holland (ex oficio, non-voting member)

# **B. Graduate Program Director (GPD)**

The Graduate Program Director is the primary administrative liaison between graduate students and the department and between the department and the Graduate School. In this capacity the GPD 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 GPD's job is to handle the day-to-day flow of graduate applications and to compile and make that information available to the GPC and other faculty.

# C. GES Graduate Student Organization

The GSO is the university-recognized organization for graduate students in geography and environmental systems 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 environmental systems are by default members of the GSO. The organization serves a number of important roles within the department and wider university community. Representatives from the GSO are elected each year to serve as a non-voting representative in faculty meetings. The GSO is also active in voting for a CAHSS representative in the Graduate Student Senate. The Senate 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 GSO leadership.

The GSO 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.

# D. Department Chair

The Chair of the Department of Geography and Environmental Systems plays a crucial role in the graduate program, particularly in terms of setting the priorities for the GPC. The Chair reviews all GPC 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.

# 2. DEPARTMENTAL CULTURE

# A. General Policies, Culture, Diversity, and Inclusion

The Department of Geography and Environmental Systems strives to create a vibrant intellectual environment that is conducive to learning and the free exchange of ideas in an open, accessible, collaborative, and supportive climate. The Department is committed to the pursuit of academic rigor while providing an environment that is free from all forms of discrimination, harassment, exploitation, or intimidation for every person. We welcome all individuals regardless of their age, ancestry, color, disability, gender identity or expression, genetic information, military status, national origin, caste, race, religious beliefs, sex, sexual orientation, veteran status, economic status, political views, or any other form of difference or identity.

We aim to foster a sense of shared experience and common purpose for everyone in the department, along with a collective responsibility for each other's well-being and for the well-being of the department as a whole. Academic rigor and intellectual exchange of ideas are integral parts of development as scholars. All exchanges among members of the department are to be conducted in a respectful, professional, collegial manner that is accepting of the diversity of backgrounds within the community.

Further, the Department is a space where we see difference as central to informing our research process, and our goal is to work openly to understand our own unique identities, experiences, and viewpoints in order to grow not only individually but collectively. We see difference as a strength that provides new perspectives and creative thinking. We acknowledge the need for continuous improvement to foster an environment that values self-reflection about and ongoing adaptation to the needs of the department and its members. We therefore seek to continually improve inclusion within our community and to foster a welcoming atmosphere for new students, faculty, postdocs, and staff.

The Department of Geography and Environmental Systems is committed to the constant work that is necessary to facilitate new frameworks, ideas, and paradigms, and new leaders within the discipline. We aim to sustain the highest level of research and teaching possible, and to cultivate discourse among diverse parties both within and beyond our classrooms, conferences, and publications.

The Department aims to extend to each member of the community the resources necessary to achieve the highest levels of distinction in their work and scholarship. While all members of our community are responsible for achieving these goals, we understand that power is embedded in the academy and those of us who possess it must use this power to create an inclusive community. The Department of Geography and Environmental Systems has a unique role and perspective within the College, the University, our community, and in the academy in its study of space, place, and environment. We thus acknowledge that the university was established upon the land of the Piscataway and Susquehannock peoples and that, over time, citizens of many more Indigenous nations have come to reside in this region. We also acknowledge the history of slavery and the slave trade in building Maryland and Baltimore, and the legacies of redlining and other forms of racial segregation here. We additionally acknowledge that the academy, along with the discipline of geography itself, is historically bound to colonial aims and intentions and is still tied to and upholds imperialism, racism, cisheteropatriarchy, and ableism today, among other sorts of violence based on the fabrication of hierarchies of difference. Therefore, it is our responsibility to confront and uproot these inequalities on behalf of social justice.

This statement on general departmental policy, culture, and inclusion is inspired by the work of other scholars and departments, and echoes the policies, statements, and sentiments of the University of Maryland Baltimore County. For support and additional information, please see:

- UMBC Mission and Values (https://about.umbc.edu/mission-and-vision/)
- Sexual Misconduct Policy and Procedures, including sexual harassment, gender discrimiantion, interpersonal violence (<a href="https://oei.umbc.edu/umbcs-policy-on-prohibited-sexual-misconduct-interpersonal-violence-and-other-related-misconduct/">https://oei.umbc.edu/umbcs-policy-on-prohibited-sexual-misconduct-interpersonal-violence-and-other-related-misconduct/</a>)
- Discrimination and Equal Opportunity Policy (<a href="https://oei.umbc.edu/discrimination-policy/">https://oei.umbc.edu/discrimination-policy/</a>)
- Resources for Academic Support, including the Student Disability Services (https://about.umbc.edu/academic-support/)
- Resources for Health and Wellbeing, including counseling, health services, sobriety support, and the Women's Center (<a href="https://about.umbc.edu/health-wellbeing/">https://about.umbc.edu/health-wellbeing/</a>)
- Title IX (https://oei.umbc.edu/gender-discrimination-sexual-misconduct/1)

# **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. Typically, incoming graduate students have already selected their advisor prior to enrolling. At the PhD level we won't accept a student unless there is already a willing advisor. At the Master's level it is possible to enter without a predefined advisor, though this is not common.

Things to consider when selecting an advisor:

- They must be a regular faculty member of the department
- You must identify an advisor by the end of your first semester
- You may change advisors at any time (except when graduating or advancing to candidacy)
- Co-advising is a viable option
- Some potential advisors may be unavailable due to other duties or a lack of fit with the advisee's interests, topically or methodologically.

#### To change your advisor:

- Consult with the GPD
- Consult with, and come to an agreement with, both the new and old advisor
- If both the new and old advisor are amenable to the switch, inform the GPD of the switch
- If one advisor (the old one or the new one) objects to the switch, then the matter will be brought to the Graduate Program Committee for review and a decision.

# **Co-Advising**

In some cases, it is appropriate for a student to have a co-advisor. For this to happen both advisors must agree to this arrangement. In cases of co-advising it is critical that there is clear communication between both advisors and the student.

# **Advising Best Practice**

<sup>&</sup>lt;sup>1</sup> We thank the following departments for their important statements on culture, climate, diversity, and inclusion: (1) UCSC Principles of Community, (2) Department of Geography at The Ohio State University, (3) Department of Geography at the University of Kentucky, (4) Toulon School of Urban Studies and Planning at Portland State University

You should meet with your advisor at the start of every academic year to review theachievements 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. You may work with your advisor to develop a more frequent schedule of meetings as needed, throughout your time as a student or during particular times when more consultation and advice are needed.

# **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. If it is not possible to take a class with prospective committee members, it may help for you to arrange a meeting with individuals to discuss your research ideas, how that faculty member could add to your committee, and whether they are available. You should also discuss additional committee members with your main advisor(s). 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 MS thesis track and all PhD students:

- All students should form a committee by the end of their first year
- Number of committee members varies; see below
- Keep track of the number of "regular" and "associate" graduate faculty on the committee; UMBC requires a certain number of "regular" status (see below)
- Committees should be approved by the GPD

You may change your committee at any point up until six months before you intend to defend your dissertation or thesis. In the case of shared advising responsibility (i.e. coadvising), the two advisors must decide who will chair exams (comprehensive, candidacy, or final).

#### For Master's students:

- 3-5 faculty members
- At least 2 must be faculty in the Department of Geography and Environmental Systems

#### For PhD candidacy exam committees:

- Minimum 4 faculty members for the comprehensive exams
- Minimum 5 faculty members for the proposal defense
- At least 3 must be "regular" or "associate" graduate faculty in the Department
- At least 3 total committee members must be "regular" status graduate faculty at UMBC

#### For PhD dissertation committee:

- Minimum 5 faculty members
- The majority must be faculty in the Department of Geography and Environmental Systems
- At least 3 total committee members must be "regular" status graduate faculty at UMBC

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 (apart from pandemic times, the Graduate School allows one member to appear via video conferencing). Multiple members may appear by video but this requires permission from the Graduate School. We therefore encourage students to balance their desire for a 'dream committee' against the logistical challenges of meeting regularly and substantively with that committee.

It is possible for composition of a student's pre-candidacy committee differs slightly from that of the student's so-called "Dissertation Committee." This reflects the different pedagogical 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 Director in writing as soon as they are made; committee members for the final dissertation defense must be nominated at least six months prior to the defense.

#### **Required Committee Meetings - PhD Students**

PhD students are required to have the following meetings with their committee:

- 1. Initial advisory meeting: completed at the end of the students' 2nd semester
- Pre-comprehensive exam meeting. This is to determine if the student is ready to proceed with the comprehensive exams. Completed by the students 3rd semester.
- 3. Comprehensive Exam Defense: completed by the student's 4th semester.
- 4. Proposal Defense: completed no later than the end of the semester following the student's comprehensive exam. A successful proposal defense is the final step for the student to officially advance to candidacy.
- 5. Dissertation Defense: The Graduate School has a "4-year rule". Students must defend their dissertation no later than four years from the time they advance to candidacy.

In addition to these meetings, the student needs to submit an annual advising report to the GPD. This report is due by the end of Spring semester.

Each of these meetings has required paperwork. Please see the department website for the correct forms.

#### A brief note on forms

Throughout your time as a graduate student you will have to fill out many different forms. It is important to keep in mind that there are basically two types of forms, Departmental forms and Graduate School forms.

GES Department forms can be found on our website. <a href="https://ges.umbc.edu/degree-progression-and-forms/">https://ges.umbc.edu/degree-progression-and-forms/</a>

Graduate School forms can be found at the Graduate School website. https://gradschool.umbc.edu/students/forms/

Almost all Graduate School forms are now online-only DocuSign forms. Department forms have not been converted to Docusign yet and remain word documents.

There are strong pedagogic benefits associated with committee meetings. Sitting down with all your committee members 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

- 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. Failure to meet the minimum meeting schedule for committee meetings may result in the student being declared no longer making good progress toward degree, which can result in the loss of funding.

# **Required Committee Meetings: Master's students**

Master's students do not have to follow the same above schedule for committee meetings as PhD students. Non-thesis Master's students do not have a committee at all. The only required committee meeting for thesis-option Master's students is the final thesis defense.

#### 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 timely as possible for your advisor and committee. After all, a faculty member pressured by an untimely letter request or provided with insufficient information 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.

# **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. As research projects evolve, it may be helpful to continue the conversation about authorship and attribution, for example if the graduate student takes on new roles or generates new ideas for a project. If the policies appear unfair, students may seek mediation with the GPD, but this disagreement may be grounds for seeking out a different advisor. Should this be impractical, students should bring their concerns to the GPD 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.

#### Professionalism and issues of misconduct

Any breach of professionalism by any party in the graduate student-faculty relationship is unacceptable and must be addressed immediately, particularly those relating to sexual misconduct, harassment, or discrimination and in which power imbalance is used to coerce, intimidate, or silence. Students who have experienced or witnessed sexual misconduct or forms of discrimination and bias (such as those based on race, sexuality, disability, or health status) should report the incident through UMBC's Office of Equity and Inclusion (OEI).

In the case of other breaches of professionalism, graduate students wondering how to proceed should bring the problem to the immediate attention of the GPD or to the Department Chair. If neither seems appropriate, please contact UMBC's human resources department.

If the student feels that misconduct involves issues of sex, including sexual and gender based harassment, sexual assault, sexual coercion, relationship violence, domestic violence, sexual exploitation, sexual intimidation, sex and gender based stalking and retaliation, then such misconduct constitutes a potential Title IX violation. Please consult <a href="UMBC's Title IX procedures">UMBC's Title IX procedures</a> for more information.

# 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 start with communication—shared objectives, clearly defined expectations, frequent contact, and periodic feedback. At a meeting before the semester begins, instructors/advisors and Graduate Research and Teaching Assistants 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, regular 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 instructors of record) 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.

Instructor positions: Doctoral students in good standing who have passed their candidacy exams may be asked to take on the primary instruction role for introductory or 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 limit these full-teach assignments for students who have reached candidacy.

Research positions: Faculty frequently hire research assistants to assist them with some aspect of their research, from literature reviews to lab work to data analysis. These are positions that should be approached with the same diligence and professionalism required of any position. As with teaching assistantships, 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 Graduate Program Director or Department Chair immediately.

Teaching assistants, Instructors, and Research Assistants are covered by policies outlined in UMBC Graduate School's <u>GA handbook</u>. Please consult this handbook for questions about pay, benefits, and other employment policies.

<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.

# **Departmental Seminar**

The Department offers multiple opportunities for professional development, including events such as poster sessions, brown-bag presentations. Particularly important is the GES Departmental Seminar and the Social Sciences Forum, in which people from other institutions as well as UMBC scholars come to give presentations on their research. These are valuable opportunities to keep abreast of developments within and beyond your discipline, and they are important networking 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). All graduate students are required to register for the departmental seminar, GES 689, during their first semester in the program, which also involves helping host visiting speakers.

# **Other Professional Development**

Conferences are an important part of interacting with other scholars, and sharing our own scholarly ideas is an important part of professional development. Registration for conferences, including joining scholarly paper or poster sessions, often occurs several months before the conference, so plan ahead and consult with your advisor about conferences that you should consider participating in. Your advisor and fellow students may help you find organized panels and sessions for which you can submit an abstract.

Before attending a conference, work with your advisor and other graduate students to do practice runs of your conference presentations. In these settings, graduate students not only represent themselves, but they represent the Department and the University. Groups within GES such as the GSO, Human Geography Roundtable, or your advisor's lab group are great sources for feedback as you prepare your presentation.

Further, UMBC has many departments and hosts numerous events. Graduate students should take advantage of the myriad events ongoing at any time including, but not limited to, speaker series organized by the Center for Social Science Scholarship (CS3), the Dresher Center for the Humanities, and the Center for Urban Environmental Research and Education. News about events that are deemed particularly relevant to geographers and environmental scientists are typically relayed through the departmental graduate listserv and myUMBC.

#### **Social Events**

The Department and groups such as the GSO and the undergraduate Council of Majors organize a variety of social events throughout the year such as the coffee hours, picnics, hikes, and the end of the year award/graduation reception. All graduate students are encouraged to attend these events.

At the beginning of each fall, the GPC and the GSO will coordinate a graduate student and faculty committee with new students.

#### **Mental Health**

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, isolating, and anxiety-inducing, and many students report that their transition to grad school is challenging and occasionally overwhelming. Maintaining healthy relationships and routines, and building new connections with fellow grad students and with others in the GES and UMBC community can be rewarding and help provide mutual support through the challenges of graduate school. Other important practices for supporting mental health can include (but are not limited to) knowing your limits or boundaries (for example, setting hours during which you will not respond to emails or do school work); celebrating successes; communicating clearly and openly about topics such as expectations and limitations; and sharing struggles with others.

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. Fellow students can also be a strong support network. Your committee members, the GPD, 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. The UMBC counseling center is an on-campus resource available to you.

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

The Graduate School considers a student to be in "good standing" if they maintain a GPA above a 3.0. Students who do not maintain a 'B' (3.0) average may be placed on academic probation. To avoid dismissal from the Graduate School, the student must achieve a cumulative GPA of at least 3.0 by the end of the semester following being placed on probation.

The Department of Geography and Environmental Systems 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 GES 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 TA, RA, 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
- Maintain good grades ("As" or "Bs") and clear any "incompletes" on a timeline agreed upon with course instructor

What happens if the department determines that I am not making "good progress"?

"Good progress" is a departmental designation. Bottom line: if you are deemed to not be making "good progress" you could lose your funding if you are on a TA line. This is not a decision the GPC takes lightly, and we want to see all of our students succeed. The most likely initial outcome is that you will be given one semester to get back on track. However, if a student is clearly not making good progress the committee can reallocate funding to another student. Three ways in which students can fail to meet "good progress" is: 1) the timely achievement of candidacy; 2) neglecting committee meetings; 3) failing a course ("failure" meaning anything below a "B"). When a student passes their comprehensive exams, they must successfully defend their proposal by the end of the following semester. Failure to do this will automatically result in the student considered to be no longer making good progress and lose their TA funding. Similarly, another way a student could no longer be considered to be making good progress is by failing to have the required committee meetings on time. These are not the only ways a student can fail to maintain "good progress". The GPD reviews each student's annual report, and if there are signs that the student is not making good progress, this will be brought up to the GPC to potentially declare that the student is no longer in good standing.

# **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 to follow up on the general expectations and personal goals from the fall to ensure that you are making good progress toward your degree. At the end of the academic year you and your advisor are to submit an annual report to the GPD. The annual report form can be found at:

https://ges.umbc.edu/degree-progression-and-forms/

In addition to your annual report, you are to submit to the GPD an updated curriculum vitae.

Students who are not considered to be making "good progress" (the higher, Department standard) will be so informed in a letter from the Graduate Program Director. 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, they may lose departmental funding support and/or may be denied further registration in the graduate program.

#### E. Grievance Procedures

We understand that problems do arise. When this happens, a discussion with the GPD may be enough to resolve the issue. While we do have formal grievance procedures, please always start by meeting with the GPD. 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 and Environmental Systems.

Students must first bring the grievance to the attention of the GPD. The written grievance should include:

- a. Student name
- b. Department
- c. Position (if any; RA, TA)
- d. Faculty Advisor
- e. Statement of Grievance
- f. Relief Requested

The Graduate Program Director and the Department Chair will review evidence to determine whether a valid grievance exists and, if so, how it may be resolved. 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.

If the student is not satisfied with how their grievance is resolved, they may then appeal their grievance to the graduate school. The procedures for resolving a grievance with the Graduate School are outlined on their website

https://catalog.umbc.edu/content.php?catoid=27&navoid=1714

#### The following is a relevant excerpt: :

- If efforts at the program level fail to resolve the situation or if the program fails to act, the student then may contact the associate dean of the Graduate School. The student should present the problem to the associate dean in writing, describing the situation in detail, outlining what was done at the program level to attempt a resolution and the desired remedy. The student should file notice of the grievance with the associate dean within 30 calendar days of the time the departmental efforts to mediate the situation had failed.
- The associate dean will provide the student's statement to the Mediation Committee (MC) to be acted upon at its next monthly meeting. The MC will request information, also to be submitted in writing, from the GPD and/or the chairperson, stating the program's position and describing the efforts that were made to resolve the situation. The advisor may also provide input at this time, but such input must be submitted through the GPD. The MC may solicit other information and take written testimony from students and faculty during the factfinding portion of the inquiry.
- The MC will review all relevant material provided by the student, GPD and chairperson. The MC may request additional information and/or meet with the parties involved. Upon completion of its review, the MC will make recommendations for resolution of the situation in writing to the associate dean of the Graduate School.
- The associate dean will make a written ruling based upon the recommendations of the MC within two weeks of its receipt and establish any sanctions commensurate with the offense, if any. The decision and action of the associate dean as well as the MC recommendations will be conveyed in writing to the student, the faculty member, the GPD and the chair of the department. The student and/or faculty member may appeal the decision of the associate dean. Such an appeal should be made in writing and should state reasons for the appeal to the dean of the Graduate School within 30 calendar days of the receipt of the associate dean's ruling. The final decision as to the appropriate resolution of all cases will rest with the dean of the Graduate School. The dean will endeavor to make a decision on the appeal within 10 days after its receipt.
- If an MC member is involved in the controversy before it reaches consideration of the MC, the associate dean will name an alternate to the MC to replace the member involved in the situation.
- Times stated in these procedures will be shortened, if feasible, when circumstances are relevant to an advancement decision. Times stated in these procedures will be extended when circumstances do not permit student, faculty or administrative actions within the specified time frames. The associate dean shall make all decisions to shorten or extend the schedules, but the associate dean may not require that the dean decide on an appeal within a certain time. The associate dean's decisions with respect to scheduling shall be final.

- \* Initially, the three faculty members will be appointed to staggered terms, as follows: one to a term of one year and two to a term of two years. This will provide for overlapping terms in subsequent years.
- \*\* Note, for example, that instances of alleged arbitrary and capricious grading, sexual harassment, student academic misconduct and other misconduct are dealt with under other Graduate School policies or campus policies.

# 3. 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 funding section of this handbook). The annual review process 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 GPC 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 leave of absence, including leave from the continuous enrollment policy for post-candidacy PhD students.

Specific time limits on graduation and other issues regarding timely completion of degree are described further under the specifics of the master's and PhD 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 GradForms).

# **Plagiarism and Academic Misconduct**

UMBC 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 Graduate Student Code of Research and Scholarly Conduct, 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 University
  Policy and Procedures Concerning Research Misconduct is available on the
  Office of Research Compliance website.
- Academic Misconduct. The university's Committee on Academic Misconduct is responsible for reviewing charges of academic misconduct against students, including graduate students. The Code of Student Conduct 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 and environmental scientists, ensure that students are exposed to the breadth of inquiry in geography and environmental systems, 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.

#### Ph.D. Requirements (44 credits minimum)

# Core Courses (7 credits):

- GES 701 Intro to Geography and Environmental Systems (3)
- GES 702 Research Methods in Geography and Environmental Systems (3)
- GES 689 Department Seminar (1 credit, to be taken in Fall of the first semester)

#### Required Courses (7 credits):

- GES 686 Introduction to Geographic Information Systems (4) or equivalent
- Graduate Level Statistics Course (3)

(STAT and GIS requirements can be waived if a student has already taken equivalent courses graduate level, but those 7 credits must be filled with appropriate electives; this will require faculty evaluation of course syllabi.)

#### Electives (12 credits)

Electives will be chosen in consultation with the faculty advisor and committee. One of these electives will be selected from among the following areas: Social Science Methods, Remote Sensing, Computational Methods and Modeling, and Environmental Science Field and Laboratory Methods. Additional electives will be chosen based on the specific subject areas needed to prepare for success in conducting doctoral research. Courses offered by Geography and Environmental Systems or by other departments can be used as electives where they meet a particular need.

#### **Dissertation (18 Credits):**

GES 899 – Dissertation Research

# I am a PhD student but I got my Master's with GES so I have already taken the required classes. Do I still need to take classes?

Yes. You do not have to take the required classes again but you still need to reach the appropriate amount of credits: 26 credits to go ABD; 44 credits total to graduate.

#### M.S. Requirements (30 credits minimum)

We offer both a Thesis and a non-Thesis option for the Master's degree; either option will require at least 30 credits. A Thesis Option Masters requires six hours of research credit (GES 799) leading to successful completion and defense of the M.S. thesis. A Non-Thesis Option Masters requires a minimum of 18 credits taken in courses numbered 600 or higher. The graduation requirement for the Non-Thesis M.S. option includes two research papers, either or both of which may be expanded from course-related project work.

Core courses (7 credits):

- GES 701 Introduction to Geography and Environmental Systems (3)
- GES 702 Research Methods in Geography and Environmental Systems (3)
- GES 689 Department Seminar (1 credit, to be taken in Fall of the first year; students expected to attend in subsequent semesters but not for credit)

Required courses (7 credits):

- Graduate Level Statistics Course (3)
- GES 686 Introduction to Geographic Information Systems (4)

(STAT and GIS requirements can be waived if a student has already taken equivalent courses graduate level, but those 7 credits must be filled with appropriate electives; this will require faculty evaluation of course syllabi.)

Electives: 10 credits (Thesis option), 16 credits (non-Thesis option)

Electives will be chosen in consultation with the faculty advisor and committee. One of these electives will be selected from among the following areas: Social Science Methods, Remote Sensing, Computational Methods and Modeling, and Environmental Science Field and Laboratory Methods. Eligible courses available each year will be determined by the faculty and the list will be disseminated to faculty advisors and graduate students.

Research credits

• GES 799 – 6 credits (Thesis option)

#### 5-year Pathway

GES BS+MS Five-Year Pathway Undergraduate students interested in this program should consult with their GES faculty advisor as early in their academic career as possible. The advisor will verify that the student's academic progress is sufficiently advanced to allow successful completion of the requisite graduate-level courses while also completing the requirements for the Bachelor's degree in their senior year. Given advisor consent and approval by the GES graduate program director, students in their Junior year secure permission to join the pathway, allowing them to take up to 9 credits of graduate-level courses, including GES 701/702, during their senior year. This permission requires a form filled out by the student and signed by the GPD that the student files with the UMBC Graduate School.

(http://www.umbc.edu/gradschool/essentials/forms.html).

What paperwork do 5 year pathway students need to turn in to graduate?

# Four things:

# Two forms for the GPD

- At the end of your final semester of your undergraduate career: 5-year pathway advising report
- No later than three weeks before your graduation date: Scholarly paper approval form

# Two forms for the Graduate School

Apply to graduate early in the semester you wish to graduate

Certificate of Completion of Master's Degree Requirements (this is generally due a few days before graduation). This is the final form that is needed before UMBC will let you graduate. It must be signed by the GPD. The GPD will not sign it until your "Scholarly paper approval form" is turned in.

In their Senior year, students then apply for admission to the GES MS program following the regular graduate <u>admissions process</u>.

Students often enroll in **independent study (691)** or **dissertation research (898/899)** 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.

#### **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, college and/or other institutions in the University of Maryland System. Note: Registration for classes outside of GES must not conflict with a Departmental teaching assignment. The student needs to contact the registrar's office to initiate inter-institutional enrollment.

#### Course Load

The minimum number of credits 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.

Students with a teaching assistant or research assistant position need to be enrolled full-time (9 hours). This does not mean they need to take 9 hours worth of classes. If they are taking less than 9 hours they should enroll in GRAD 600 or GRAD 601 to make up the difference. For example, if a teaching assistant is enrolled in 6 hours of classes, they also need to enroll in 3 hours of GRAD 601 to reach nine hours. GRAD classes are 'dummy' courses with no content or grades, and exist only as bureaucratic markers to allow you to meet "full time" status.

Students that are "All But Dissertation" (ABD) should enroll in 9 hours of GES 899. This will result in only 2 credit hours being charged (to the student or department, depending on the situation).

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 600 level and above). **Enrollment in undergraduate credits fails to meet the Graduate School and Departmental minimum requirements unless at the 400-level under strict circumstances, in consultation with the GPD and advisor.** 

#### What Statistics course should I take?

There are a variety of ways to satisfy the department's statistics requirement. Taking a graduate level course in the statistics department, however, is an uncommon way for GES students to meet this requirement. These courses require prerequisite training in probability theory, and they stringently enforce these requirements. GES offers two courses that meet the statistics requirement: GES 688 and GES 608. Many human geographers take SOCY/PUBL 604 (it is the same class). You need instructor permission to enroll, but they usually grant it. Below are some courses students have taken in the past to successfully complete the graduate level statistics requirement. You may take a course at another school within the Maryland System. You just need to complete the <u>interinstitutional enrollment form</u> from the Graduate School. If you are looking for specialized statistical training that is not available to you via UMBC or other Maryland System campuses it is possible to creatively address your learning goals by combining an online Coursera course combined with an independent study. The GPD will need to pre-approve such a plan of action. Consult with both your advisor and the GPD if you are interested in this approach.

Class	Title	Offered	Campus
GES 688	Spatial Statistics	Spring	UMBC
GES 608	Field Ecology	Fall and Spring	UMBC
PUBL 604	Statistical Analysis	Fall and Spring	UMBC
SOCY 604	Statistical Analysis	Fall and Spring	UMBC
GEOG 606	Quantitative Spatial Analysis	Spring	College Park
ANTH 630	Quantification and Statistics in Applied Anthropology	Unsure	College Park
MEES 698B	Environmental Statistics	Fall	MEES
MEES 608R	Applied Bayesian Statistics	Spring	MEES
MEES 708M	Environmental Statistics II	Unsure	MEES
GEOL 651	Statistics for Geoscientists	Fall (Even years)	College Park
PUBL611	Causal Inference in Program Evaluation	FALL	UMBC

#### 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 addresses a gap in their field of interest, and thus results in the production of new knowledge.

#### **Research Proposal**

Most master's students and all PhD students are required to write a proposal, with PhD students making a proposal presentation in their advisory committee. At the master's level, a proposal is usually essential if you are interested in seeking non-Departmental support for your research. At the PhD level, a formal research proposal is required and is typically due to the committee after the candidacy exam. See below for more information on the dissertation proposal.

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.

#### **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 require 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, UMBC has an "Institutional Review Board," or IRB, that is designed to ensure that researchers (be they undergraduates, graduates, or faculty) who work with human subjects or animals identified by the IRB in no way harm them or put them at undue risk. If you plan to work with human subjects or designated animals, your proposed research must be approved by the IRB.

Getting this approval takes time, and details about the IRB process can be found from on campus IRB resources. Requirements change periodically. 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 will 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 policy regarding financial support for conference travel.

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 6 years) the on-line dissemination of the document until the work is published in article or other format.

# **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 rules, regulations and norms for all master's degrees. These rules stipulate minimum credit requirements: the MA/MS degree requires a minimum of 30 graduate credit units. The Graduate School also provides a Summary of Master's Degree Graduate Requirements and a checklist of Final Semester Procedures-Master's.

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 Master's committee.

# **Timely Completion of Degree**

You should plan to graduate by the end of your second year in the master's program, although an extra summer or even a third year is sometimes needed when theses involve substantial field work.. 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.

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

# <u>YEAR 1</u>

**Fall** Plan coursework with (interim) advisor

**Spring** Form committee by the end of the semester. Apply for research grants (as necessary)

Meet in spring with advisor and one member of the advisory committee. Internal documentation of the latter can be found on the Department's website.

#### **Summer** Conduct research

#### YEAR 2

**Fall** Research (continued) and data analysis. It is recommended that the student report to their committee on summer progress. Begin application process to PhD programs if interested.

**Spring** Continue data analysis and complete writing thesis. Depending on specific dates set by the graduate school, in general the thesis needs to be ready for the committee by the beginning of March. Defend thesis and make any necessary corrections and graduate.

#### Master's Format: Thesis or Non-Thesis Option?

Students must choose between one of two approaches to the master's program: A Thesis or Non-Thesis option. A Thesis is the result of a research project and typically designed to be published as a journal article. The thesis is defended in front of a committee of at least three faculty during an oral exam, the result of which determines whether you fulfill the requirements for the degree. Non-Thesis students complete two scholarly papers, topics of which are discussed with a faculty advisor and approved by at least two faculty in the Department.

The decision to pursue the Thesis or Non-Thesis option is typically made by the advisor and student at the beginning of the mentoring relationship.

#### **Master's Examination**

Student's pursuing the thesis option must successfully complete an oral defense of the thesis. The forms and procedures for this are listed below. [G] is a graduate school form and can be found here:

https://gradschool.umbc.edu/graduation/forms/

[D] is a departmental form and can be found here:

# https://ges.umbc.edu/degree-progression-and-forms/

Application for Diploma for Master's Degree Enrollment Day 10 of terminal [G] semester Nomination of Members For The Final 2 months prior to defense Examination Committee [G] Deliver Thesis to Advisor(s) 20 business days prior to the defense Certification of Completion of Master's Thesis 10 business days prior to the defense [G] Deliver Thesis to the Committee 10 business days prior to the defense Report on the Defense of the Master's Thesis 7 weeks prior to [D] commencement Certification of Completion of Master's Degree 3 weeks prior to commencement Requirements [G] Approval Sheet [G] 3 weeks prior to commencement

# When do I need to turn in my thesis to my committee?

Your thesis needs to be turned in to your committee 11 weeks prior to graduation in the semester you want to graduate. This means ~March 1 for Spring, ~June 1 for Summer, and Oct 1 for Fall.

# Oh no! I want to graduate in Spring, but won't be finished with my thesis until May 1, can I still graduate in the Spring?

No. You will have to do a Summer graduation. Fortunately, you do not have to register during the summer and can still graduate, so long as you were registered in the previous Spring semester. See the <u>Graduate School</u> for more details.

Students writing a Master's thesis need to successfully complete an oral defense of their thesis.

#### Master's exams must follow these guidelines:

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 student fails if more than one committee member deems the thesis and/or defense to be unsatisfactory.
- The committee decides whether the Master's thesis is satisfactory.
- Appropriate forms are filled out and the results of the committee's decisions are discussed with the student.

It is often likely that the thesis will require revisions. There are two types - "Minor" and "Major". Note that all required revisions that are expected will be articulated to the student in writing at the end of the defense or shortly thereafter. Minor revisions are largely editorial or insignificant such as to not change the meaning of the thesis. The advisor generally signs off on whether these are completed before the student turns the thesis into the Graduate School. Major revisions are substantive and members of the committee may want to see and approve the revisions before the student submits the thesis to the Graduate School.

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.

# 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 completed application will be considered alongside all other applications received for the PhD program. All files will be evaluated according to the same criteria, including academic excellence and fit with the department. The Graduate Program Committee, 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.

### Moving from Master's to PhD without completing the Master's

In rare circumstances, it is possible for a student to transfer to the PhD program before completing the Master's degree. This is not a generally recommended option, but can occur under certain circumstances. For a student to "transfer" from Master's to PhD. The following procedures must occur.

- The student must complete one full year of coursework as a Master's student.
- After one year of coursework, the student convenes a meeting with their committee (consisting of at least three professors in the GES department), and the committee unanimously agrees that the student should move from Master's to PhD before completing the Master's degree.
- Upon unanimous consent of the student's committee, the advisor writes a letter
  of recommendation, outlining the rationale for moving the student to the PhD
  program.
- The Graduate Studies Committee reviews the student's transcripts and advisor recommendation. The student and/or advisor may be asked to appear before the GPC to discuss the request.
- If the GPC approves (with majority approval) then the student may move to the PhD program.

# 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 and Environmental Systems and a specialist in a particular subfield, while creating new knowledge that is rigorously grounded in a robust and appropriate empirical and theoretical context.

Completion of the PhD degree occurs in three stages: 1. Coursework; 2. Candidacy; 3. Dissertation Writing

#### Coursework

The GES Department requires 44 credit hours of coursework in order to graduate.

Prior to advancing to candidacy, students must complete 26 hours of coursework.

## Core Courses (7 credits):

- GES 701 Intro to Geography and Environmental Systems (3)
- GES 702 Research Methods in Geography and Environmental Systems (3)
- GES 689 Department Seminar (1 credit, to be taken in Fall of the first semester)

### Required Courses (7 credits):

- GES 686 Introduction to Geographic Information Systems (4) or equivalent
- Graduate Level Statistics Course (3)

(STAT and GIS requirements can be waived if a student has already taken equivalent courses at the graduate level; this will require faculty evaluation of course syllabi.)

### Electives (12 credits)

Electives will be chosen in consultation with the faculty advisor and committee. One of these electives will be selected from among the following areas: Social Science Methods, Remote Sensing, Computational Methods and Modeling, and Environmental Science Field and Laboratory Methods. Additional electives will be chosen based on the specific subject areas needed to prepare for success in conducting doctoral research. Courses offered by Geography and Environmental Systems or by other departments can be used as electives where they meet a particular need.

### **Post-Candidacy Coursework**

After advancing to candidacy, students enroll in GES 899: Dissertation Research, and must complete at least 18 credits (2 semesters) of GES 899.

#### Candidacy

To advance to candidacy, students must complete all required coursework (listed above), pass their comprehensive exams, and pass their proposal defense.

### **Comprehensive exams**

The format of the comprehensive exams is set by the student's committee and is meant for the student to demonstrate they have acquired appropriate expertise in their identified sub-fields. The comprehensive exams require four committee members. After the comprehensive exams, the "report on the doctoral comprehensive examination" must be filed with the Graduate Program Director.

If the student fails the comprehensive examination, and the committee recommends they be allowed to retake the exam, the student may retake it. If the student fails the comprehensive exam the second time, they will need to leave the program.

If the student passes the comprehensive examination, they then move on to the proposal defense. The proposal must be successfully defended by the end of the semester following the comprehensive exams. If the students fails to pass the proposal defense by this time, they will no longer be considered to be making "good progress" toward the degree and may have their teaching assistantship revoked.

## **Proposal Defense**

After comprehensive exams are passed, the student must pass their proposal defense. This must be completed by the end of the semester following the successful comprehensive exam.

The length and format of the dissertation proposal is to be decided by the student, advisor, and committee members.

The dissertation proposal defense must have **five committee members** (inclusive of advisor). After the defense of the dissertation proposal the "Report on the Defense of the Dissertation Proposal" must be filled out and turned in to the GPD.

If the proposal defense fails, the committee may decide to allow the student to retake the defense. If the student fails the proposal defense a second time, they will be asked to leave the program.

If the proposal defense is successful, the student must complete the Application for Admission to Candidacy for the Degree of Doctor of Philosophy DocuSign form from the Graduate School. Completion of this form is what allows the student to advance to candidacy.

### **Timely Completion of Degree**

See Appendix X for a timeline of degree completion.

The PhD should be completed in four complete academic years, 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 dissertation proposal and complete the candidacy exam within their first two years. 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.

Extra time may be required to complete your PhD. You will have a maximum of nine years 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 end of your third year in the PhD program or you will forfeit any potential funding offer for your fourth year. Also, a failure to complete your candidacy examination within four years 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.

# **Candidacy Exam**

Admission to candidacy is arguably the most important step in the PhD program

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

- expertise in the subject matter of your area of specialization
- a working knowledge of the appropriate bodies of theory and methodology
- 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:

Comprehensive exams are generally taken at the end of the second year.

If not taken by the end of the third year, you may no longer be considered a student making "good progress" toward your degree, and you could lose funding.

If the Candidacy Exam defense is not taken by the end of the fourth year, you will be expelled from the program.

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.

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 the department 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 oral portion of the exam takes two hours. The candidate is asked questions about their written responses by all committee members in turn.

Attendance at the Candidacy Examination to the student and members of their committee only. No other persons are to be present during the exam.

Following the oral examination, the student's advisor and committee must submit the "Report on the Doctoral Comprehensive Examination". The student fails if there is more than one "unsatisfactory" vote.

If for any reason a failure is recorded 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. Failure to pass the candidacy exam a second time will result in expulsion from the program.

### **Proposal Defense**

Successful completion of the candidacy exam means that the student is eligible to defend their proposal. A successful oral defense of the student's dissertation proposal is what allows the student to "advance to candidacy" and become "ABD". The exact nature of the proposal is determined by the student's advisor and committee.

The proposal defense must occur no later than the semester following the successful candidacy exam defense. Failure to complete the proposal defense by this deadline means the student is no longer considered to be making "good progress" to degree, and may have their funding terminated.

This is a closed-door exam. The student schedules the date, time and meeting location of the proposal defense. This should be established several weeks in advance. The committee is comprised of 5 faculty members. All must hold a terminal degree in their field. Once the student has finished to the satisfaction of the committee, they will be dismissed from the room while the committee discusses the student's performance. Each committee member registers a vote of Satisfactory or Unsatisfactory. The student is then called back into the room. The student passes if no more than one Unsatisfactory vote is registered. The committee may have requirements for the student upon passing. If the student failed, the committee has the option of (1) recommending cancelling the student's matriculation, or (2) re-scheduling the defense after meeting requirements set forth by the committee. Upon passing, the student advances to candidacy.

#### Dissertation

Writing and defending a doctoral dissertation represents the culmination of the PhD program. The specific length and format of the dissertation proposal is determined in consultation with the student's advisor and committee.

Initially you will prepare a working draft of the dissertation for your advisor and/or committee. Expect this draft to undergo several revisions. Once your proposal has been deemed acceptable by your advisor, you distribute it to your committee for an oral defense.

A satisfactory defense of the proposal may still result in additional revisions to the proposal that the student must complete. These revisions should be outlined in the "Report on the Defense of the Doctoral Dissertation Proposal".

After this form is signed and turned into the GPD, the student may then submit Application for Admission to Candidacy for the Degree of Doctor of Philosophy to the Graduate School. This DocuSign form must be signed by the GPD. Once this form is approved by the Graduate School, the student officially advances to candidacy.

The entire exam takes three hours and has two main components.

### Presentation by the candidate of the research

This portion is open to the public and department attendance is encouraged. The total presentation (inclusive of questions from the audience) should be no more than one hour. At least a week prior to the defense, students must send their abstract along with the time and date of the defense to the GPP for circulation to the department.

# Private discussion among the committee members and student

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 and the committee. 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; with prior approval of the Graduate School, a member may attend through video conferencing.

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.

### Final paperwork

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.

# https://gradschool.umbc.edu/graduation/forms/

The full timeline and required forms for the dissertation defense is listed below:

Departmental forms are indicated with a [D] and can be found on the GES department website.

https://ges.umbc.edu/degree-progression-and-forms/

Application for Diploma for the Degree of Doctor of Philosophy [G]	Enrollment Day 10 of terminal semester
Nomination of Members For The Final Examination Committee [G]	6 months prior to defense
Deliver Dissertation to Readers	20 business days prior to the defense
Announcement of Ph.D. Dissertation Defense [G]	2 weeks prior to the defense
Certification of Completion of Doctoral Dissertation [G]	10 business days prior to the defense
Deliver Dissertation to the Committee	10 business days to the defense
Report on the Defense of the Doctoral <u>Dissertation</u> *[D]	7 weeks prior to commencement
Approval Sheet [G]	3 weeks prior to commencement

# 4. 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. Generally, there are two types of support for graduate students.

# **Graduate Research Assistants**

The responsibilities and format for evaluation of GRAs are determined by the project manager on a semester basis. Students that have advanced to candidacy should register for 9 hours of GES 899: Dissertation Research.

# **Graduate Teaching Assistants**

GTA responsibilities vary by appointment. Most GTAs act as assistants to a classroom instructor. In some cases this may include teaching lab sections independently. This may also include working across two different courses, with part-time responsibilities for each course. GTA responsibilities are established at the beginning of the semester in consultation with the course instructor or instructors.

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 9 credit hours during fall and spring semesters. Students can use GRAD 600 or GRAD 601 as "dummy" credits to reach the minimum of nine hours. For example if a student is taking two 3 hour courses, they should also register for 3 hours of GRAD 600 to reach the 9 hours. GRAD courses are not real courses, but administrative fictions that allow the student to be properly understood by the University bureaucracy.

<u>For Summer GTA and GRAs</u>. Students should enroll in either GES 898, GES 899 (if the student is ABD), or an Independent Study course. They should also enroll in GRAD 603 to reach the minimum of 3 credit hours needed for Summer enrollment. Note, for summer you need to enroll in GRAD 603 for the "dummy" credits, not GRAD 600 or 601.

### **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.

Students must maintain the appropriate level of enrollment throughout the term.

# **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, 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, (person).

Stipend payments are biweekly over a ten month period (August to June).

Stipends for Graduate Research Associates are comparable to those of Graduate Teaching Associates but can vary depending on the conditions of the grant funding that supports the GRA.

#### B. Fees

GTAs also have their fees covered by the department. GRA fees may be covered by the faculty sponsor, or may not. It depends on the conditions of the grant that supports the student.

#### C. Benefits

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

#### **Health Insurance**

Student Health Insurance offer benefits that include medical and prescription drug coverage. Student Health Insurance's health plan includes medical, dental and vision coverage.

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 Student Health Insurance website.

# D. 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 UMBC.

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 receives the funds as described. This is because funding commitments are renewed every year based on evidence (garnered during the spring review process) of the student's good progress through their program. Should the student not meet the conditions for making good progress 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.

# 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 Robin Schmidbauer or Donna Dwayer with any questions regarding travel policies.

# **Departmental Support for Presenting at Conferences**

The department provides up to \$500 support to graduate students to present their research at one meeting (per year) at academic conferences relevant to the student's research. Your funded conference travel must be approved in writing (via email) by the GPD and Department Chair prior to making travel arrangements. All students on University sponsored travel must file and "E-Travel" form prior to leaving. See Robin Schimidbauer to make travel arrangements and to file the "E-Travel" form.

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.

#### **Travel Procedures**

UMBC has quite a few onerous requirements if you want to travel. This is true for both students and faculty. All travel must go through a pre-approval process. You should initiate travel pre-approval as soon as you know you will be traveling. Do not wait to do this!! There is no way around this. You must receive travel approval prior to your trip.

The University's pre-approval FAQ is here: <a href="https://wiki.umbc.edu/display/faq/Travel+Pre-Approval">https://wiki.umbc.edu/display/faq/Travel+Pre-Approval</a>

The GSA has a decent explainer of the pre-approval process here: <a href="https://gsa.umbc.edu/travel-pre-approval/">https://gsa.umbc.edu/travel-pre-approval/</a>

One big mistake that many graduate students make is that, after receiving word of department or GSA funding for their travel, they spend their own money up front, and then seek reimbursement. You can do this, but your reimbursements are taxable, and it will take some time for you to receive the money. If you don't need the money any time soon, and don't want to receive all of it back (because of taxes), then by all means do this. A better option is to coordinate travel expenses such as hotels, flights, and conference fees with Robin. If the department is giving you money, it is best to spend that money through Robin first, rather than wait for reimbursement later. Some things need to be reimbursed later (like per diem), but you should try and get everything paid for up front as much as possible.

Finally a note on travel procedures. You will need to work with the department administrators (ie. Robin and Donna) concerning pre-approval, funding, reimbursements etc. You are one of roughly 50 graduate students. In addition, there are also 20 faculty. All of these people route their travel requirements through Donna and Robin. Handling student and faculty travel is just one of the many things these administrators do for the Department. Please be sure to exercise patience, courtesy, and basic common politeness when handling your travel requests (and any other request!). If you're reading this and thinking "of course I would do that" then good for you! But not everyone does, especially when they find out their reimbursement isn't coming for another month, and they need to pay the bills. That is bad when something like that happens, but it isn't Robin or Donna's fault; so be nice!