

**Department of Geographic and Environmental  
Sciences,  
MS Applied Geography Program  
Graduate Student Handbook**

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## Introduction and Program Overview

Welcome to the MS in Applied Geography program at the University of Louisville! This handbook contains a description of our program and serves as a guide to our basic policies and procedures so that you will have a working knowledge of your opportunities, obligations, and responsibilities.

Our [Master of Science in Applied Geography](#) program was implemented in Fall 2010. It is a 30-hour program with both a *thesis* and *non-thesis* path to graduate. Requirements for both paths include 12 hours of foundation courses and 12 hours of electives. The thesis path requires 6 hours of thesis credits, while the non-thesis path requires 6 further hours of electives in place of thesis credits. The program curriculum enables full-time students (defined as taking 9 hours of courses during the Fall and Spring semesters) to complete their degree within two calendar years. The program also admits part-time students who must complete their degree within 6 years of program initiation. An accelerated BS/MS program is available for qualifying undergraduate majors in any of the BS Applied Geography degree tracks in which up to 9 graduate-level credit hours (at either the 500 or 600 level) taken during the Senior year may also be subsequently applied to the MS Applied Geography program.

The program is housed in the [Department of Geographic and Environmental Sciences](#), located on the second floor of Lutz Hall on the main Belknap Campus. Our mission is to foster inquiry about the physical and social realms of the world's environments and the interactions that occur between these two realms. The MS Applied Geography program is designed to provide students with the analytical skills and background knowledge needed to solve real-world problems with geographic dimensions. Graduate students experience a nucleated body of coursework designed to foster and support the theoretical knowledge and advanced skill sets demanded for the professional and academic/research fields. Coupled with the enhanced level of course content, quantitative, qualitative and spatial data analysis applications, and the departmental emphasis upon critical reasoning, effective writing and communication skills, graduates will be capable and prepared for effective integration into a broad diversity of professional fields.

Our course offerings and faculty research areas include geographic information systems (GIS), remote sensing, climatology and meteorology, urban and regional studies, quantitative and qualitative methods, medical geography, globalization, hydrology and water resources, geomorphology, transportation and location analysis, border security, land use/land cover change and the geography of food and race.

## General Academic Policies and Procedures

The undertaking and completion of the MS Applied Geography degree is directly administered by the Department of Geographic and Environmental Sciences as described in this handbook. However, all enrollees in the program are also subject to administration from the College of Arts and Sciences (the college enrolled in) and the Graduate School. All students must also, therefore, adhere to the general policies and procedures as outlined in the current university [Graduate Catalog](#) whilst enrolled in the MS Applied Geography program.

## Application Procedures and Minimum Requirements

Students from geography and related fields are encouraged to apply. All applicants must hold a BA or BS degree from an accredited college or university and must have earned a minimum cumulative 3.0 GPA to be admitted in good standing. Students with a minimum cumulative 2.75 GPA may be accepted under special conditions.

All applicants must complete/submit the following:

- A [graduate admissions application](#)
- Official transcripts from all colleges and/or universities attended
- Two letters of recommendation addressing the candidate's academic abilities, readiness for graduate study, and potential for success. Letters from current and/or former faculty members are preferred.
- A statement of interests and intent covering relevant experience, potential areas of research/study, academic/career goals, and how the MS in Applied Geography would allow the applicant to achieve these goals.

All materials must be submitted to the Graduate School.

## International Student Applications

In addition to the above requirements, **international students** from nations whose primary language is not English must submit English proficiency scores. Applicants may demonstrate English proficiency by submitting any of the following official materials:

- TOEFL (internet-based test): 79 or higher
- TOEFL (paper-based test): 550 or higher
- TOEFL Essentials: 8.5 and above
- IELTS: 6.5 or higher overall score from the academic module exam
- Duolingo: 105 or higher
- SAT: Evidence-Based Reading and Writing score of 490 or higher (SAT taken March 2016 or later)
- ACT: English sub-score of 18 or higher
- AP: English Language and Composition score of 4 or higher
- IB: 5 or higher on the English Language and Literature exam

Students may also demonstrate English proficiency by:

- completing two consecutive years of full-time high school in the U.S or any high school where English is primary language of instruction, with a grade of C or higher in English. This exemption is granted only based on official transcripts.
- completing two consecutive years of full-time university/college in the U.S. or university/college where English is the primary language of instruction, with a grade of C or higher in English 101 or 102. This exemption is granted only based on official transcripts.

Any prior transcripts from non-US institutions and/or not in English must also be translated and verified using an official transcript evaluation service (e.g. [WES](#)). International applicants are responsible for any additional costs associated with these verification services.

### **Application Deadlines**

- **May 15** for the following fall semester (international applicants and individuals desiring consideration for Graduate Assistantships should apply by **March 15**)
- **November 15** for the following spring semester

### **Acceptance Status**

Admissions decisions are made by the Department's Graduate Program Committee, typically within two weeks of the application deadline. This committee is comprised of the Director of Graduate Studies and two other faculty members appointed by the departmental Chair (see Department Faculty Information section of this handbook). Students who are admitted to the program will be placed in one of the following categories:

1. Good standing - all admission credentials must have been received and evaluated. The applicant must have earned a minimum 3.0 GPA.
2. Provisional – application is incomplete at the time of admission. All missing credentials must be submitted by the end of the student's first full semester. International applicants must provide missing credentials before they arrive in the US. Failure to provide missing credentials may result in suspension or removal from the program.
3. Special conditions – for students whose applications are complete, but whose academic background is below the minimum for the program. Students admitted in this status will be expected to meet certain criteria within a specific timeframe as outlined by the department's Director of Graduate Studies in their acceptance letter.
4. Non-degree status – Applicants who do not desire to seek an advanced degree but wish to take graduate course work may be permitted to enroll in non-degree status. Please note that not all programs will admit students to non-degree status. Application credentials must include a completed application for admission, application fee and an official transcript showing the award of a baccalaureate degree. No more than nine (9) credit hours of course work taken in a non-degree status may be applied to a graduate degree program with departmental approval, and no more than fifteen (15) credit hours may be accumulated while in non-degree status.

### **International Student Admission Information**

Upon admission to the program, international applicants will need to schedule an appointment for a visa interview at their closest US Embassy/Consulate, in order to obtain an F1 visa required to study in the US. The university's [International Student and Scholar Services \(ISSS\)](#) will contact all applicants initially admitted to the program to request the necessary documents prior to this interview. These documents can be found on the [ISSS International Admissions page](#). Please contact the ISSS for all visa/immigration questions.

International students should be aware of the federal regulations governing their immigration status during and after completion of their study program. Violation of any of these regulations may result in the loss of visa status. International students with F1 visas must register with the ISSS and maintain their status whilst in the program. Information pertaining to maintaining status can be found on the [ISSS Maintaining Status page](#).

### **International Student Health Insurance**

All international students on F1 visas are required to maintain health insurance as a stipulation of their visa with US Citizenship and Immigration. These students are automatically billed for the university-sponsored student insurance program on their tuition bills. International students with Graduate Assistantship (GA) funding are automatically provided health insurance August-May as part of their funding but are required to pay for the student health insurance during June-July or request a waiver. Information on health insurance costs and waivers can be found on the [Campus Health Services International Student page](#).

### **Organization Assisting & Serving International Students (OASIS)**

[Organization Assisting & Serving International Students \(OASIS\)](#) are a registered student organization of the University of Louisville. OASIS provides many free services useful to new international students moving and transitioning to Louisville. This includes arrival assistance from the airport and temporary housing from volunteers if needed. OASIS also puts on various social events throughout the semester.

### **Graduate Assistantships**

The Department of Geographic and Environmental Sciences has a limited number of Graduate Assistantship (GA) funded positions available each year as provided by the Graduate School. ***These are typically only available for Fall semester applicants.*** Students interested in being considered for a GA position should indicate this in their statement of interest during the application process. GA funding includes a full-time tuition remission (9 hours enrollment Fall and Spring semesters), a stipend of \$13,000 per year and university health insurance. This funding may be repeated for an additional year based on a review of academic and GA duty performance, and continued availability of funding.

GA's work up to 20 hours per week on contracts that run for ten months from August 1-May 31 each year. Tuition, stipend and health insurance is not included June-July, although GAs are not required to enroll in courses over the summer. New GAs are expected to be present in Louisville and enrolled in classes by August 1st before the start of the Fall semester and beginning GA duties. GA duties normally include assisting faculty with teaching and research responsibilities during the first year, and may include instructor of record positions during the second year based on department teaching needs and student qualifications. The department will provide GAs with any necessary training and guidance specific to their duties. GAs given instructor of record duties will also need to attend and complete a graduate teaching orientation through the Graduate School before assuming these duties. Furthermore, GAs will not be assigned as an instructor of record for a class until they have completed 18 credit hours towards their degree program.

All GAs will be reviewed in terms of their performance at the end of each semester by the Director of Graduate Studies in consultation with the GA supervising faculty. GAs working as instructors of record will also receive student evaluations at the end of each semester, and a teaching evaluation review conducted by a member of the department's personnel committee also submitted to A&S Faculty Affairs at the end of each calendar year.

### **International Students and Graduate Assistantships**

International students admitted to the program and selected to receive GA funding must submit their GA offer letter to the ISSS as part of the documents described in the *Additional International Admission Information* section of this handbook. The GA positions satisfy the financial requirements for international applicants. However, international students must pay for summer health insurance (June-July) or request a waiver as described in the *International Student Health Insurance* section of this handbook. International student GAs are expected to be present in Louisville and enrolled in classes by August 1<sup>st</sup> before the start of the Fall semester and beginning GA duties.

### **Other Funding Opportunities**

The Department may also offer other scholarships to students in good standing. These scholarships may cover some of the tuition costs but are dependent on departmental resources at any given time.

Research and teaching assistantships may also be available from individual faculty via funded research projects. Faculty members in the department can provide information about any current funded research projects. Other sources of financial aid can be found on the [Graduate School Academics](#) page.

### **Curriculum and Required Coursework**

The MS Applied Geography program requires a minimum of 30 credit hours at the graduate level, including 12 hours of foundation courses, 12 hours of electives, and 6 hours of thesis (GEOG 698 for the thesis path) OR 6 additional hours of electives (for the non-thesis path). Program courses are coded as Geography (GEOG) and Environmental Sciences (ENVS). Up to 6 hours of electives can be taken from programs outside of the department. Additional non-GEOG/ENVS graduate credit may be taken with approval from the Director of Graduate Studies. A minimum of 15 hours (excluding thesis, practicum and internship credit) must be taken at the 600-level. Thesis (GEOG 698) credits range from 1-6 hours. Students must be enrolled during the semester they graduate. If all required course credits have been completed, students may opt to take additional graduate hours or enroll in Masters Candidacy (MAST 600) which has a flat fee (see the [Office of the Bursar Tuition](#) page for current MAST 600 fee). **If a student enrolls in MAST 600, they will be automatically enrolled in MAST 600 for each following semester until they graduate.**

**Geographic Information Science (GIS) proficiency is required for all incoming students.** If not already attained at the undergraduate level or elsewhere as demonstrated in the application materials, students will need to take GEOG 558 (Introduction to GIS) in addition to the 30 credit



hours required by the MS Applied Geography program. This course is offered in the classroom or online during the Fall and Spring semesters.

The following foundation courses are required:

**GEOG 600: History and Philosophy of Geography** - An explanation of the history of geographic thought and the paradigms that have shaped geography since the late nineteenth century.

**GEOG 641\*: Research Design and Proposal Development in Applied Geography** - Provides students with the background needed to design a research study and develop a research proposal and culminates in development of thesis proposal.

**GEOG 656: Spatial Statistics** - The analysis of spatial patterns and processes through the use of spatially-based statistics.

**GEOG 660: Qualitative Methods in Applied Geography** - An examination of the philosophical underpinnings of the qualitative approach with practical experience in conducting qualitative research.

\*GEOG 600, 656 and 660 are pre-reqs to GEOG 641. However, based on scheduling, they may be taken concurrently or after completion of GEOG 641 in special circumstances. This will require approval from the Director of Graduate Studies.

### **Independent Studies (GEOG 691)**

Students in the MS Applied Geography program may take ***GEOG 691 Research and Independent Study*** for elective course credit as part of their degree. Independent studies are an opportunity for students to work on a research project or similar activity with a member of faculty in the department. Each independent study may count for 1-5 credit hours and there is no limit on how many independent studies a student may enroll in. Students wishing to enroll in independent study should contact the corresponding faculty member to discuss the details of the project. Once the details and outcome of the project are agreed, an Independent Study request form must be filled out and signed by both the student and supervising faculty, before approval from the Director of Graduate Studies and Department Chair. See the ***Useful Forms*** section of this handbook to access this form.

### **Schedule of Classes**

Students may search for classes offered in past, present and future semesters using the university's [Search for Classes](#) scheduler. Courses pertaining to the MS Applied Geography degree are listed as ***Geography (GEOG)*** and ***Environmental Sciences (ENVS)*** in the **Subject** drop down list. Students should select ***Graduate*** from the **Couse Career** list to show graduate level (500-600) courses that may count towards the degree. The scheduler also contains descriptions of all courses offered along with any pre-reqs.

## **Academic Calendars and Course Registration Information**

The university [academic calendar](#) lists important dates for each semester for all students, including deadlines to add and drop classes, withdrawing from classes, holidays, start and end semester dates and final exam periods. Course [registration processes and procedure information](#) for all students may be found on the Registrars Office site.

## **Tuition Fees and Residency**

Tuition fees for graduate courses are available from the [Office of the Bursar](#). Resident vs non-resident tuition status is determined at the application stage. For more information see the [Graduate Residency Policy](#) page.

## **General Degree Requirements and Satisfactory Academic Progress**

At least 15 credit hours must be in courses of the major subject area (GEOG/ENVS), and the remaining hours in the program distributed as recommended and approved by the Director of Graduate Studies. At least one-half (15 hours) of the credits counted toward the degree (exclusive of thesis, practicum and internships) must be in courses open to graduate students only (600 level or above). A GPA of 3.0 or better must be maintained throughout the degree program to remain in good standing towards satisfactory academic progress. A student must also be in good standing in order to receive a degree.

Students in the MS Applied Geography program may receive up to 6 credit hours of coursework in which a grade of C+, C, or C- was received to count toward the completion of degree requirements. However, if the GPA drops below a 3.0 at any time, the student will be placed on academic probation for the following semester. Students on academic probation must improve their GPA to a minimum 3.0 by the end of that semester or risk being suspended or removed from the program. *No grades below a C- may count towards the Master's degree.* The [Graduate School's Academic Dismissal Process](#) details the policies and procedures should a student be dismissed from the program for failing to attain satisfactory academic progress or for other reasons.

## **Graduate Student Academic Grievance Procedure**

Any graduate student who feels that they have been treated unfairly, discriminated against, or have had their rights abridged may initiate a grievance. The procedure for this is detailed in the [Graduate Student Academic Grievance Procedure](#) section of the current Graduate Catalog.

## **Transfer of Credits**

The number of credit hours transferable, upon request, is six (6) to meet the residency requirement of 24 semester hours taken at the University of Louisville towards the overall degree credits. See the *Useful Forms* section of this handbook to access the transfer of credits request form.

Coursework taken more than three years prior to the student's application to a graduate program will not normally be considered for transfer; however, such requests will be reviewed by the Vice Provost for Graduate Affairs upon recommendation by the department chair and the unit dean.

The course work being considered for transfer must have been taken while the student was enrolled in an accredited graduate or professional school and must be evaluated for transfer by the Director of Graduate Studies. Six (6) credit hours may be transferred from a previously earned master's degree toward a second master's degree, subject to the approval of the degree program and the unit dean. Hours earned toward a culminating experience such as a thesis, practicum, or internship shall not be transferable to the second master's degree. Only courses in which the student earned grades of B or better will be considered for transfer. Hours and quality points earned at other institutions are not included in the calculation of a student's grade point average.

Courses in which grades of P were earned must have the approval of the unit dean in order to be transferred.

Transfers of graduate credit from constituent schools and colleges of the University of Louisville are not subject to the above limitations on transfers but require the recommendation of the department chair and the approval of the unit dean. Upon approval of the graduate program, students may apply the coursework from no more than one certificate program towards a graduate degree program.

### **Thesis and Non-Thesis Paths**

Students must declare their intention to graduate via the thesis or non-thesis path before completion of GEOG 641. The completion of the degree for each path is detailed below.

#### **The Thesis Path**

Before completing GEOG 641 students will identify a thesis advisor from the Department of Geographic and Environmental Sciences faculty. The thesis advisor will serve as the main thesis research mentor and Chair of the thesis committee.

#### **The Thesis Committee**

Your thesis committee consists of your thesis advisor, one other department faculty member and a further member from outside the department. Any member of department faculty who is active in research may serve as your thesis advisor or sit on the committee. The external committee member should be someone who has expertise in the thesis research area. All committee members external to the College of Arts and Sciences will need an ad hoc graduate appointment approved by the Director of Graduate Studies and unit Dean before serving on the thesis committee. For all non-UofL appointed committee members, the thesis chair must submit a CV/resume and a short letter justifying their inclusion to the Director of Graduate Studies for approval. Exceptions to these guidelines for involvement with graduate education at the masters'

level must be documented and approved by the Dean of the College of Arts and Sciences and approved by the Vice Provost for Graduate Affairs. Once you have chosen your committee you will need to complete the Thesis Committee Appointment Form and submit to the department's Director of Graduate Studies and Chair for approval. See the *Useful Forms* section of this handbook to access this form. All three members will also need to sign off on your completed thesis.

### **Thesis Formatting**

A thesis requires specific formatting created and approved by the Graduate School. More information on formatting procedures can be found on their [website](#). Some time prior to turning in the final thesis the student must contact [Courtney Kerr](#) to set up a formatting review of their thesis. The department does not review formatting procedures.

### **The Thesis Defense and Graduation**

To graduate from the thesis path, students must successfully defend their thesis research by giving an oral presentation of the research to an invited audience (the committee and typically faculty and students in the department) during their final semester. The thesis defense is usually scheduled for approximately 1-1.5 hours, allowing time for a presentation by the student and follow up questions by the committee and other invited persons. The exact format of your presentation and scheduling should be discussed with your thesis advisor. Following the defense the committee will deliberate the quality of the thesis and the defense before issuing a PASS or FAIL. Students need a simple majority pass to pass overall. Upon passing, students may need to perform some final edits before the committee signs the thesis defense form. This must then be submitted to the Graduate School by that semester's deadline as set by the Graduate School. If a student fails their thesis defense, they will be required to address any issues raised by the committee before rescheduling the defense at an appropriate time in the future. The Director of Graduate Studies should also be informed of these instances.

### **Former Graduate Theses**

The University of Louisville's Ekstrom Library maintains a partial digital collection of thesis research from former graduate students in the MS Applied Geography program, which may be accessed [here](#).

### **The Non-Thesis Path**

Students electing the non-thesis path before completion of GEOG 641 will identify a comprehensive exam advisor (whomever serves as the student's proposal advisor in GEOG 641). This advisor will serve as the mentor for the comprehensive exam committee.

### **The Non-Thesis Comprehensive Exam and Graduation**

Students opting the non-thesis path must take and pass a written comprehensive (comps) exam during their final semester in order to graduate from the program. The student will need to

select two other faculty in the department to sit on their comps exam committee in consultation with the comps exam chair. They do not need anyone external to the department.

Each committee member should be sent a copy of the candidate’s final thesis proposal from GEOG 641. They each then need to submit to the comps chair a series of questions based on the thesis topic and/or geography in general for the comps exam. The comps chair will also do the same.

Once the comps chair approves the questions they will arrange a time for the exam with the candidate. The exact format of the comps exam is decided by the advisor in consultation with the Director of Graduate Studies. The student then submits all required answers to the comps chair who then sends the specific answers to each respective committee member to grade and provide feedback (if necessary). A simple pass/fail is required (pass demonstrating general proficiency in the research area). **If a committee member decides to fail the candidate based on the answer to their question(s) they must provide detailed feedback to the candidate as to why.**

The committee members send their decision and any feedback to the comps chair who then forwards to the candidate and Director of Graduate Studies. **Students need a simple majority pass to pass overall to graduate. Should they fail overall they will need to re-sit the exam in consultation with the comps advisor and Director of Graduate Studies.**

### Recommended Full-Time Sequence of Courses

Assuming full-time graduate enrollment (9 hours Fall and Spring), an MS Applied Geography student can complete the program in two calendar years. The following is a recommended sample sequence of courses for the thesis and non-thesis paths based on the typical offering of foundation courses, and entering the program during the Fall semester:

#### Thesis Path Year 1

Fall	Spring
GEOG 600: History of Geography	GEOG 660: Qualitative Methods
GEOG/ENVS elective	GEOG 656: Spatial Statistics
GEOG/ENVS elective	GEOG/ENVS elective
<b>9 hours</b>	<b>9 hours</b>

#### Thesis Path Year 2

Fall	Spring
GEOG 641: Research Design/Proposal Dev.	GEOG 698: Thesis (3 hours)
GEOG/ENVS elective	
GEOG 698: Thesis (3 hours)	
<b>9 hours</b>	<b>3 hours</b>

**Total 30 Hours**

### Non-Thesis Path Year 1

Fall	Spring
GEOG 600: History of Geography	GEOG 660: Qualitative Methods
GEOG/ENVS elective	GEOG 656: Spatial Statistics
GEOG/ENVS elective	GEOG/ENVS elective
<b>9 hours</b>	<b>9 hours</b>

### Non-Thesis Path Year 2

Fall	Spring
GEOG 641: Research Design/Proposal Dev.	GEOG/ENVS elective
GEOG/ENVS elective	
GEOG/ENVS elective	
<b>9 hours</b>	<b>3 hours</b>

### **Total 30 Hours**

### Accelerated BS/MS Program

The Department of Geographic and Environmental Sciences offers an accelerated BS/MS program in which exceptional majors in any of the BS Applied Geography degree tracks may earn up to 9 graduate-level credit hours (at either the 500 or 600 level) during their Senior year. These graduate-level courses are then counted towards both the BS and MS Applied Geography degrees, allowing students to go on and complete the graduate degree with the remaining graduate hours, saving both time and expense. If enrolling full time in the graduate program, students may graduate with the MS Applied Geography degree in as little as 2-3 semesters, instead of the usual 4. Undergraduate students interested in the accelerated program should contact the department's Director of Graduate Studies before their Senior year for more information.

### Part Time Enrollment

Students opting to enroll part time must complete their degree within six years of beginning their program of study. Coursework that is older than six years will not count toward your graduate degree and will need to be repeated.

### Continuous Enrollment

Students who have been accepted into the MS Applied Geography program are expected to remain in continuous enrollment, either full-time or part-time, throughout their matriculation. Students who fail to enroll for a period of more than 12 months will be considered to have withdrawn from the program. However, if circumstances arise that may cause an interruption in graduate study, a student may apply for a leave of absence by requesting such a leave from the unit dean. A requested leave cannot exceed one year; however, under extreme circumstances, a second, subsequent request may be granted by the Vice Provost for Graduate Affairs. Students must be considered in good standing for the request to be considered and should first check with the Director of Graduate Studies to make sure the program is willing to grant such a leave. If granted, a leave of absence does not count toward the time you have to complete your degree.

## Applying for Graduation

Students must apply to graduate for their chosen semester by that semester's deadline. These deadlines may be found on the Graduate School's website. Failure to apply before the deadline may delay or even prevent graduation for that semester. Students must have a minimum 3.0 GPA to graduate.

## Graduate Advising

The Director of Graduate Studies serves as the initial advisor for all students admitted into the MS Applied Geography program. During this time, the Director of Graduate Studies will advise each student on which courses to enroll in, check in on academic progress and schedule in-person meetings with each student as necessary. By the start of the second year (full-time) students will identify a thesis proposal advisor from the department faculty who will guide their thesis proposal development in GEOG 641 and Chair the thesis committee (for the thesis path) or comprehensive exam committee (for non-thesis path) as described in the corresponding sections of this handbook.

## Useful Forms

The College of Arts and Sciences has a [list of forms](#) for students, many of which are useful for Graduate students, including Independent Study requests, Thesis committee appointment and transfer of graduate credits.

## Department Faculty Information

**Wei Song, Ph.D. (Department Chair).** The Ohio State University.

Research Interests: Location analysis, transportation geography, urban crime, China.

Email: [wei.song@louisville.edu](mailto:wei.song@louisville.edu) Tel: 502-852-2690

**C. Andrew Day, Ph.D. (Director of Graduate Studies).** Texas State University-San Marcos.

Research Interests: Hydrology/water resources, land cover & climate change.

Email: [a.day@louisville.edu](mailto:a.day@louisville.edu) Tel: 502-852-2703

**Andrea Gaughan, Ph.D. (Director of Undergraduate Studies).** University of Florida.

Research Interests: Human-environment interactions, land change & climate variability, remote sensing.

Email: [ae.gaughan@louisville.edu](mailto:ae.gaughan@louisville.edu) Tel: 502-852-2697

**William (Scott) Gunter, Ph.D.** Texas Tech University.

Research Interests: Meteorology, remote sensing of wind, measurements, severe storms, wind hazards.

Email: [william.gunter@louisville.edu](mailto:william.gunter@louisville.edu) Tel: 502-852-2739

**Jafar Hadizadeh, Ph.D.** Imperial College, London, UK.

Research Interests: Structural geology, faulting and fracturing processes, brittle ductile transition, rock mechanics.

Email: [j0hadi01@louisville.edu](mailto:j0hadi01@louisville.edu) Tel: 502-852-2691

**Carrie Mott, Ph.D.** University of Kentucky.

Research Interests: Political geography, historical geography, settler colonialism, feminist epistemologies.

Email: [carrie.mott@louisville.edu](mailto:carrie.mott@louisville.edu) Tel: 502-852-2699

**Jason Naylor, Ph.D.** University of North Dakota.

Research Interests: Meteorology, severe storms & tornadoes, tropical cyclone dynamics, numerical modeling.

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## **Center for Geographic Information Sciences (CGIS)**

The Department of Geographic and Environmental Sciences houses the Center for GIS (CGIS). Through channels of teaching, research, and community engagement, the mission of the CGIS is to provide access, instruction, and applications in geospatial technologies. The resources of the CGIS are available to professional staff, students, and faculty. The CGIS staff and faculty are available to assist UofL administrators, faculty, and the community at large in all aspects of geospatial research.

## **Department Facilities**

Through the CGIS, the department maintains the Audwin and Rae Helton Center for Geographic Information Sciences Laboratory. The Helton Lab, located in Lutz Hall room 224, was established in 2011, thanks to a generous gift from Audwin Helton and Rae Helton, Spatial Data Integrations (SDI) in Louisville, KY. The lab contains 22 workstations complete with the latest geospatial software including ArcGIS Pro and ENVI for remote sensing. The CGIS also provides poster printing services and a variety of research equipment for collecting, analyzing and managing geospatial information.

## **Graduate Student Council (GSC)**

The [Graduate Student Council \(GSC\)](#) at the University of Louisville represents all non-professional graduate students, advocating for their academic, leadership and professional development. Every student pursuing a graduate degree is automatically a member of the GSC. Excluded students, MD, DMD, JD, MBA, or MEng, are represented by governance within their academic unit. GSC executive officers and departmental representatives collaborate to set policies, support graduate research and create programming that enhances the graduate experience.

The GSC serves as a platform for open communication between students and university leadership and provides opportunities for graduate students to engage in governance roles within the Student Government Association (SGA) and beyond. By advocating for student rights and promoting academic initiatives, the GSC plays a vital role in shaping a thriving, supportive graduate community.

The Department of Geographic and Environmental Sciences is expected to have a graduate student from the MS Applied Geography program represent the department on the GSC. Department representation also ensures all graduate students in the program remain eligible to receive additional funds for research and travel. At the start of each academic year the Director of Graduate Studies will request a volunteer from the MS Applied Geography program to serve as the department's GSC representative for the year. Further information on GSC representative duties may be found on the GSC site above.

## **Graduate Network in Arts & Sciences (GNAS)**

Formed in 2009, the [Graduate Network in Arts and Sciences \(GNAS\)](#) is the official representative body of A&S graduate students. GNAS is composed of representatives from each of the college's graduate degree-granting departments, providing social events and funding opportunities for graduate students in the College. Meetings are held monthly during the fall and spring semesters.

The Department of Geographic and Environmental Sciences is expected to have a graduate student from the MS Applied Geography program represent the department in GNAS. Department representation also ensures all graduate students in the program remain eligible to receive additional funds from GNAS in the form of Travel, Research, and Creative Activities Grants. At the start of each academic year the Director of Graduate Studies will request a volunteer from the MS Applied Geography program to serve as the department's GNAS representative for the year. Further information on GNAS representative duties may be found on the GNAS site above.

## **Graduate Student Conference/Geography Conference Opportunities**

All graduate students in the MS Applied Geography program are encouraged to present their research at appropriate conferences when possible. Each Spring semester (usually in March) the GSC hosts the [GSC Annual Regional Research Conference \(GSRRC\)](#) on campus. GSRRC offers graduate students an opportunity to share their research with the University of Louisville community through oral talks and poster presentations, while gaining valuable experience in presenting their work to an interdisciplinary audience. It also highlights the diversity of research on campus and across the region, and allows students to engage in meaningful networking opportunities. There is no fee to present, attend, or register for the conference, although students must still register for access.

Additionally, there are opportunities to present research at a number of local-to-regional geography conferences normally held during the Fall semester, including the [Kentucky Academy of Science \(KAS\)](#), [Southeastern Division of the American Association of Geographers \(SEDAAG\)](#) and [Applied Geography \(AGX\)](#). Registration costs for these conferences are typically lower and some registration costs may be covered by the department based on student interest and the availability of funding.