Geography MA – MS

Program changes 2018

Proposed New (February 2018) Clean Copy

Program Description

Geography is the systematic study of the spatial aspects of human activity, the natural world, and human-environment interaction. The discipline of geography occupies a unique position as a bridge between the social sciences (Human Geography), natural sciences (Physical Geography), and STEM fields (GIScience). From this interdisciplinary perspective, geography helps us understand and address numerous contemporary challenges ranging from economic development, urban planning, and ethnic conflict to climate change, environmental sustainability, and natural resource management. As a result, geography is a rapidly expanding discipline with diverse career opportunities across the environmental sciences, social sciences, and technological fields in both the public and private sectors. Both the U.S. Department of Labor and the Bureau of Labor Statistics predict that demand for trained geographers will grow - over the next decade.

The Geography Department prepares students to succeed as professionals in today's job market through an innovative curriculum focusing on building critical thinking, technical, and practical skills across a range of human geography, physical geography, and geospatial information science (GIScience) courses. The curriculum includes a mixture of classroom and lab instruction, hands-on projects, and professional internships experiences that actively engage students in the learning process and provide the skills necessary for lifelong learning. The department maintains state-of-the-art facilities, including technology-enhanced classrooms, a physical geography lab, and a GIScience computer lab, supporting students as they utilize the latest software and hardware. The department provides a supportive learning environment where students work closely with faculty and peers while enjoying numerous opportunities to participate in campus, state, and national professional activities.

Geography alumni have successfully applied their knowledge and practical skills in a variety of career paths in both the public and private sectors, including urban and regional planning, economic development, environment planning, natural resource and energy management, weather forecasting, emergency response and homeland security, GIS analysis, and education. Other alumni have continued with geography studies at the doctoral level.

Students wishing to earn a master's degree in geography have the option of selecting either a Master of Arts (M.A.) or Master of Science (M.S.) degree. Both the M.S. and M.A. degree options prepare the graduate for professional employment or advanced work at the doctoral level. Because M.S. students are required to complete a thesis, the M.S. option is the best

choice for students wishing to engage in geographical research projects or in preparation for entrance into a doctoral program.

For more information, please see the departmental website at www.marshall.edu/geography, email geography@marshall.edu, or call (304) 696-4364.

Admission Requirements
M.A. applicants should follow the admissions process described in this catalog or at the Graduate Admissions website at www.marshall.edu/graduate/. In addition, M.A. applicants must:

- Submit a curriculum vitae (CV) and/or résumé with the graduate application;
- Submit a letter of recommendation (either from an employer or faculty member) with the graduate application.

M.S. applicants should follow the admissions process described in this catalog or at the Graduate Admissions website at www.marshall.edu/graduate/. Potential M.S. applicants must contact the department to ensure that their thesis research interests are compatible with at least one faculty member. In addition, M.S. applicants must:

- Submit a statement of purpose/research interest with the graduate application;
- Submit a curriculum vitae (CV) and/or résumé with the graduate application;
- Submit two letters of recommendation (from employers or faculty members) with the graduate application;
- Submit GRE (Graduate Record Examination) scores with the graduate application;
- Have a minimum undergraduate GPA of 3.5 or minimum GRE scores (Verbal greater than or equal to 150 and Quantitative greater than or equal to 150 and Writing greater than or equal to 4.5).

M.S. applicants demonstrating potential but not meeting these criteria may be admitted to the M.S. program with permission from the faculty.

Graduate Assistantships
Applications for department research or teaching assistantships are available from the department website at www.marshall.edu/geography. For more information about graduate assistantships at Marshall University, please see www.marshall.edu/graduate.

For more information about other financial support, please see www.marshall.edu/graduate/.

Degree Requirements
Candidates for the master's degree must meet the general requirements for the Graduate College and complete a minimum of 34 total credits.

Required Courses

- GEO 601 Colloquium in Geography

- Any GEO GIScience course (choose from GEO523, 526, 529, 530, 531, 532, 533, 554, 631, 634, GEO690 Internship using GIScience, GEO580-584 Special Topics GIScience courses, GEO 585-588 Independent Study GIScience topics)
- GEO540 Spatial Statistics and GIS requirement waived if GEO440 Spatial Statistics and GIS passed with a grade of C or better at the undergraduate level;
- GEO 615 Geographic Thought
- GEO 616 Geographical Research Methods
- For the M.A.: GEO 679 Applied Projects
- For the M.S.: GEO 679 Applied Projects and GEO 681 Thesis

Electives:

GEO 501 Historical Geography (3 credits)
GEO 502 Geography of Appalachia (3 credits)
GEO 504 Geography of Europe (3 credits)
GEO 505 Political Geography (3 credits)
GEO 506 Population Geography (3 credits)
GEO 508 Geography of South and Middle America (3 credits)
GEO 510 Urban Geography (3 credits)
GEO 522 Environmental Geography (3 credits)
GEO 523 Cartography and GIS (3 credits)
GEO 525 Climatology (4 credits)
GEO 529 Principles of GIS 2 - Vector Analysis (4 credits)
GEO 530 GIS - Raster Analysis (4 credits)
GEO 531 Principles of Remote Sensing and Photogrammetry (3 credits)
GEO 532 Enterprise GIS (3 credits)
GEO 533 GPS and Mobile Geospatial Technologies (3 credits)
GEO 554 Drones Remote Sensing and GIS (3 credits)
GEO 607 Economic Geography (3 credits)
GEO 617-619 Seminars in Geography (3 credits)
GEO 620 Topics in Environmental Geography (3 credits)
GEO 623 Regions of North America (3 credits)
GEO 631 Advanced GIS Projects (3 credits)
GEO 634 GIS Databases & Programming (3 credits)
GEO 690 Internship (1-6 credits)

Some GEO courses may not be listed here, but still count for credit in the program; see an advisor. Of the credit hours required for the degree, at least half must be at the 600 level.

Plan of Study
A Plan of Study approved by the student's advisor must be submitted for approval to the Graduate College Dean before the student registers for his or her 12th semester hour. The Plan of Study is a student's "blueprint" for completing graduation requirements.

Minor in Geography

Students who minor in Geography should choose a minimum of six hours of appropriate courses from one of the specialties below in consultation with their major faculty advisor and a Geography faculty advisor.

Regional Geography: GEO 623, Regions of North America, is required. Choose additional coursework from GEO 502, 504, 508, 610-614, 617-619.
Physical Geography: Choose from 522, 525, 530, 531, 617-619, 620
Human Geography: Choose from GEO 501, 505, 506, 510, 522, 607, 617-619, 620
Geographic Information Systems/Remote Sensing: Choose from GEO 523, 526, 529, 530, 531, 532, 533, 540, 554, 617-619, 631, 634, 690 (must be GIScience approved in advance)