GEOGRAPHY

Degree: B.A., Geography

Department of Geography (https://cas.umw.edu/geography/)

The Geography Department hosts two majors and a certificate in Geographic Information Science. Majors in Geography and in Geospatial Analysis both lead to the Bachelor of Arts degree in Geography.

Geography is the study of the interaction between people and their environments, both natural and human. Geographers examine the places and regions resulting from such interaction and analyze the spatial characteristics of all manner of cultural, economic, political, and physical processes and relationships. Students in the Geography major select one of three areas for specialization:

Society and Politics

A focus on the geographies of people and power. Topics include planning, cities, race & place, globalization, and migration.

Culture

A focus on the geographies of how people live and make places meaningful. Topics include Latin America, the Middle East, sacred spaces, and development studies.

Environment

A focus on the geographies of natural and human environmental processes. Topics include biodiversity, natural hazards, climate change, and urban sustainability.

Through classroom and laboratory experience, field work, and community involvement, students gain the knowledge and skills required to appreciate the diversity of people and places, the integration and interrelationships of places, and the spatial processes that affect modern society.

Geography majors acquire spatial thinking skills by studying research methods appropriate for their area of specialization. These include: geographic information systems (GIS), cartography, remote sensing, field methods, quantitative, and qualitative methods. Majors are also encouraged to engage in internships, study abroad programs, and undergraduate research.

Facilities for geographic studies at Mary Washington include wellequipped laboratories for the study and practice of physical geography. GIS, cartography, and remote sensing. The department hosts a chapter of Gamma Theta Upsilon, the International Geography Honorary Society.

During the senior year qualified students may pursue Honors in Geography by completing an independent research project and writing and defending a thesis.

Geography majors have pursued a wide variety of careers. These jobs include working for GIS and mapping companies, consulting and engineering firms, as well as numerous non-profit and government organizations. Majoring in geography prepares graduates for work in many different areas, as students have experience studying both the human and physical dimensions of the world. Many graduates also choose to continue their education in graduate schools, studying everything from meteorology to political geography.

Student Learning Outcomes

- 1. Students will understand the key concepts within the integrated discipline of geography.
- 2. Students will read, interpret, and critique a map.
- 3. Students will identify, understand, and critique spatial data or evidence, whether qualitative, quantitative, or cartographic.
- 4. Students will apply a suitable geographical approach, technique, or method within a research project.
- 5. Students will identify personal strengths and areas of expertise within geography.

Major Requirements

A minimum of 35-37 credits in Geography and Geographic Information Science.

| Code | Title | Credits |
|--|--|---------|
| Core Courses | | 11 |
| GEOG 102 | Introduction to Human Geography | |
| GEOG 111 | Landform Processes | |
| GISC 250 | Introduction to Geographic Information Systems and Cartography | S |
| or GISC 200 | Introduction to GIS | |
| Methods Requirement | | |
| GEOG 352 | Quantitative Methods in Geography | |
| GEOG 363 | Qualitative Methods in Geography | |
| GEOG 365 | Field Methods | |
| GISC 340 | Remote Sensing and Air Photo Interpretation | |
| GISC 351 | Spatial Analysis | |
| GISC 355 | Mobile Geographic Information Systems and Global Positioning Systems | |
| Breadth Requirement | | |
| Out of the control of | | |

Select one course from each of the areas of specialization.

Specialization Requirement

Take 3 additional courses from one of the areas of specialization, two of which are at 300- or 400-level.

Areas of Specialization

A. Society & Politics

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|-----------------------------|--|--|--|--|
| GEOG 231 | Introduction to Planning | | | |
| GEOG 236 | Globalization and Local Development | | | |
| GEOG 237 | Cities | | | |
| GEOG 331 | Race and Place in America | | | |
| GEOG 332 | Migration Politics in a Globalizing World | | | |
| GEOG 333 | Planning Seminar | | | |
| GEOG 337 | The Nature of Cities ¹ | | | |
| GEOG 338 | Geopolitics | | | |
| B. Culture | | | | |
| GEOG 101 | World Regional Geography | | | |
| GEOG 221A | Environment & Culture in Eastern North America | | | |
| GEOG 222A | Environment & Culture in Western North America | | | |
| GEOG 301A | Geography of Latin America and the Caribbean | | | |
| GEOG 304A | Geography of the Middle East | | | |
| GEOG 335 | Sacred Spaces | | | |

| | GEOG 339A | Development Studies | | |
|--|--------------|--------------------------------------|-------|--|
| | GEOG 361 | Sustainability in Guatemala | | |
| C. | Environment | | | |
| | GEOG 110 | Introduction to Weather and Climate | | |
| | GEOG 240 | Hazards and Resilience | | |
| | GEOG 241 | Biogeography | | |
| | GEOG 245 | Environment and Society | | |
| | GEOG 325 | Dynamic Climatology | | |
| | GEOG 326 | Glacial Processes and Landscapes | | |
| | GEOG 327 | Climate Change | | |
| | GEOG 337 | The Nature of Cities ¹ | | |
| For each area of specialization, 3 credits of one of the following n be included. $^{\rm 2}$ | | | | |
| | GEOG 360 | Geographic Study Abroad | | |
| | GEOG 410 | Advanced Topics in Geography | | |
| | GEOG 485 | Readings in Geography | | |
| | GEOG 491A | Individual Study in Geography | | |
| | GEOG 494 | Community Engaged Study in Geography | | |
| Senior Seminar | | | | |
| | GEOG 490 | Senior Seminar in Geography | | |
| To | otal Credits | ; | 35-37 | |

- GEOG 337 may be used in either Society & Politics or Environment, not both.
- Additional classes from American Studies, Anthropology, Geography, Environmental Science, Historic Preservation, History, Sociology, and other disciplines will count with the approval of the Program Coordinator.

Certificate in Geographic Information Science can be found by using this link (https://catalog.umw.edu/undergraduate/minors/geographic-information-science-certificate/).

General Education Requirements

The general education requirements for Bachelor of Arts/Bachelor of Science degrees (https://catalog.umw.edu/undergraduate/general-education/requirements-bachelor-arts-bachelor-science-degrees/) apply to all students who are seeking to earn an undergraduate B.A., B.S. or B.S.Ed. degree.

Students seeking a Bachelor of Liberal Studies degree have a separate set of BLS general education requirements (https://catalog.umw.edu/undergraduate/general-education/requirements-bachelor-liberal-studies-degrees/).

Electives

Elective courses are those that are not needed to fulfill a general education requirement or major program requirement but are chosen by the student to complete the 120 credits required for graduation with a B.A./B.S./B.S.Ed. degree or the BLS degree. These courses may be taken graded or pass/fail (or S/U in the case of physical education and 100-level dance). No student in a regular B.A./B.S./B.S.Ed. program may count more than 60 credits in a single discipline toward the 120 credits required for graduation.

Total Credits Required for the Degree: 120 credits

Plan of Study

This suggested plan of study should serve as a guide to assist students when planning their course selections. It is not a substitute for a student's Degree Evaluation or the Program Requirements listed for this major in the catalog. Academic planning is the student's responsibility, and course selections should be finalized only after speaking with an advisor. Students should familiarize themselves with the catalog in effect at the time they matriculated at the University of Mary Washington. Students should also familiarize themselves with general education requirements (https://catalog.umw.edu/undergraduate/general-education/) which can be fulfilled through general electives as well as major/minor course requirements. Course requirements and sequencing may vary with AP, IB, CLEP, Cambridge or previous coursework, transfer courses, or other conditions. To be considered full-time, an undergraduate student must be enrolled in 12 or more credits for the semester.

| Course | Title | Credits | | |
|--|--|---------|--|--|
| Freshman | | | | |
| Fall | | | | |
| FSEM 100 | First-Year Seminar | 3 | | |
| General Education Cour | rses | 12 | | |
| | Credits | 15 | | |
| Spring | | | | |
| General Education Cour | | 16 | | |
| | Credits | 16 | | |
| Sophomore | | | | |
| Fall | | | | |
| GEOG 102 | Introduction to Human Geography | 3 | | |
| Breadth Requirement (E | | 3-4 | | |
| General Education Cour | | 9 | | |
| | Credits | 15-16 | | |
| Spring | | | | |
| GEOG 111 | Landform Processes | 4 | | |
| Breadth Requirement (S | • | 3 | | |
| General Education Cour | rses or Electives | 9 | | |
| | Credits | 16 | | |
| Junior | | | | |
| Fall | | | | |
| GISC 250 | Introduction to Geographic Information Systems and | 4 | | |
| or GISC 200 | Cartography or Introduction to GIS | | | |
| Breadth Requirement (0 | | 3 | | |
| General Education Courses or Electives | | | | |
| | Credits | 9 | | |
| Spring | | | | |
| Area of Specialization (| Course | 3 | | |
| Methods Course | | 3-4 | | |
| General Electives | | 6 | | |
| | Credits | 12-13 | | |
| Senior | | | | |
| Fall | | | | |
| GEOG 490 | Senior Seminar in Geography | 3 | | |
| Area of Specialization (| | 3 | | |
| General Electives | | 9 | | |
| | Credits | 15 | | |
| Spring | | | | |
| Area of Specialization Course | | | | |
| General Electives | | 12 | | |
| | Credits | 15 | | |
| | Total Credits | 120-122 | | |
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Geography Department

Melina A. Patterson, Chair Dawn S. Bowen, Career Advisor

Faculty Professors

Dawn S. Bowen Stephen P. Hanna Farhang Rouhani

Associate Professors

Caitlin C. Finlayson Jacqueline Gallagher Marco Millones Mayer Joseph W. Nicholas Melina A. Patterson Ping Yin