

GEOGRAPHY MAJOR & MINOR

ACADEMIC YEAR 2022 - 2023

Undergraduate Program Guide

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GEOGRAPHY @ CLARK

Geography is the science of place, space, and environment. Each place on earth is distinguished by a unique mix of natural resources, cultural practices, economic activities, and political systems. Geographers study what makes each place unique, and the connections and interactions between places.

With its highly ranked graduate and undergraduate programs, Clark University is one of the best places in the world to study Geography. Students will have the opportunity to work with nationally and internationally known faculty to examine why places are different, how those differences shape how we live, and how we in turn shape our environment. The Geography major and minor at Clark are set up in such a way to give students a broad understanding of physical and human elements that comprise this field of study.

PROGRAM OVERVIEW

GEOGRAPHY OVERVIEW

Geographers address various questions. Why are things located where they are? What makes societies and biophysical environments different from place to place? How does location affect access to the things all species need to survive and flourish?

Geography majors use the concepts of place and space to understand the physical and social processes that shape our planet. Students explore why places are different; the economic, political and cultural systems that connect us locally, regionally and globally; and how we shape and are shaped by our environment.

AREAS OF EXPERTISE

Clark's Geography program has four sub-fields:

- Human Environment Geography
 - Analyzes the ways that human societies have used, shaped and constructed nature; impacts of societies, economies and cultures on ecological systems; and societal and environmental consequences of the interaction. (Also referred to as Nature Society). Examples of research and practice: environmental policy and practice, food systems, agriculture, animal geographies, international development, natural resource extraction, water resource management, socio-environmental movements and conflicts, sustainability, land use, vulnerability, environmental change, resilience, hazards, and more.
- Urban Economic Geography
 - Examines the ways that space and location shape economic, sociopolitical and cultural life; ways that economic, sociopolitical and cultural factors shape space and location; and relationships between these processes and the dynamics of urban life. Examples of research and practice: socio-spatial dynamics of cities, economies, and industries, theories and discourses of economic development, innovation and entrepreneurship, social movements, legal geographies, place-making processes, critical social theory, urban politics, globalization, sustainability, political ecology, and more.
- Earth System Science

- Examines how the Earth system (ecosphere, atmosphere, hydrosphere, and lithosphere) naturally functions, how these systems interact with one another, and how they are affected by humans. Examples of research and practice: terrestrial ecosystems, global change, surface water, cold-region hydrology, terrestrial and marine biogeochemistry, polar climate change, forest ecology, glaciology, landscape and disturbance ecology, and more.
- Geographic Information Science
 - Examines the acquisition, analysis and communication of geographic information; principles and techniques important in cartography, remote sensing, geographic information systems and spatial analysis. Examples of research and practice: conservation GIS, land change modeling, image time series analysis, image classification, decision support, system development, remote sensing of the cryosphere, remote sensing of forest ecosystems, and more.

Students take courses and explore each of these areas.

LOOKING AHEAD

Clark's Fifth Year M.Sc. Accelerated Degree Program (ADP)

Geography offers an accelerated Master of Science in Geographic Information Science. To learn more about the M.Sc. in GIS ADP, <u>visit our website</u> for more information.

GEOGRAPHY MAJOR & MINOR

DECLARING A MAJOR OR MINOR IN GEOGRAPHY

The first step for students considering a major or minor in Geography is to visit the University Academic Catalog. The next step is to set up an appointment with the <u>Administrator of Degree Programs</u> who will answer any specific questions the student has and work with the student to determine a strong faculty advisor pairing.

University Academic Catalog for the **Geography Major**

University Academic Catalog for the **Geography Minor**

ADDITIONAL COMPONENTS

STUDYING ABROAD

The Geography department encourages students to spend at least one semester studying abroad, which is an added reason to consult your advisor early in your geography program. For more information, contact the Study Abroad office at 508.793.7363 or studyabroad@clarku.edu.

DEPARTMENTAL AWARDS

The geography department nominates students each year to receive an array of departmentally-funded awards to recognize academic achievement. Additionally, the department nominates one graduating student for each of the University awards in the appropriate fields. To learn more about this, visit our website.

RESEARCH FUNDING

Clark has many opportunities for funding for internships, research, and projects. More information about the types of funding opportunities available to Clark students, along with application instructions and deadlines, can be found on the <u>Career Connections Center Funding Opportunities Website</u>.

The Peter J. Condakes Research Fellowship supports undergraduate students who have an interest in environmental concerns and are conducting summer research with a geography faculty member. This fellowship is open to continuing undergraduate majors in geography, global environmental studies, and environmental science majors (earth system science track only). The recipients of this fellowship will receive a stipend of up to \$1,500 to support a summer research project. Applicants must have already completed GEOG 141 at the time of applying. The fellowship is awards up to two students each year.

RESEARCH PRESENTATIONS

Geography students participate in research presentations on and off campus. Students are encouraged to take advantage of these opportunities as the platforms are great for sharing research, networking with colleagues, and practicing presentation skills.

- ClarkFest
- AAG Conference (American Association of Geographers)

- <u>NESTVAL</u> (The New England-St. Lawrence Valley Geographical Society)
- AGU Conference (American Geophysical Union)

DEPARTMENTAL EVENTS

The geography department hosts events that students of all programs are welcome and encouraged to attend.

- Colloquium Speaker Series
- Annual Wallace W. Atwood Lecture
- Practicing Geography Week

See our <u>website</u>, <u>Facebook</u>, and <u>Instagram</u> pages for updates and listings of upcoming events.

STUDENT LIFE

Clark Undergraduate Geography Association (CUGA)

CUGA is the voice of Geography, GES, and Environmental Science ESS majors, with student representation on the undergraduate studies committee and the opportunity to attend departmental meetings. CUGA representatives are able to vote and give their ideas and opinions on various topics that concern undergraduate majors. CUGA members attend field trips and periodically have group gatherings to discuss topics of interest such as research, internships, courses and future jobs. If you are interested in joining CUGA, email clarkcuga@gmail.com to learn more.

INTERDISCIPLINARY PROGRAMS

Human Environment Regional Observatory (HERO)

The <u>Human-Environment Regional Observatory</u> program is a unique undergraduate-graduate-faculty experience that engages in research on human-environment relationships in Massachusetts. HERO Fellows conduct hands-on research under the mentorship of Clark University faculty. The research conducted by HERO Fellows often leads to scholarly publications, presentations at academic conferences, and awards.

RESOURCES

Moodle

The School of Geography Moodle page is a unique resource to all undergraduate students in the department. If you are a Geography/GES/ESS major or minor, you will have access to this page which serves as a hub for online resources, job/internship postings, research opportunities, program materials, event postings, and more.

This page is accessed by logging into Moodle with your Clark credentials, going to "My Courses", and selecting "GEOG_ug Undergraduate School of Geography". If you are enrolled in one of our programs and you do not see this on your Moodle page, contact the <u>Administrator of Degree Programs</u>.

GIS Help Desk

Each year the Geography department hires one or more undergraduate students to staff our GIS Help Desk, which is a departmental resource that provides free, one-on-one tutoring to students seeking assistance in GIS. The GIS Help Desk is in the Geography Main Office (Jefferson 220) and runs during the week. The hours change each semester, so check our <u>website</u> for the schedule. The Help Desk runs when classes are in session and sometimes during finals.

Map Library

The Guy H. Burnham Map & Aerial Photograph Library is a spatial data information center of global scope. The collection consists of 230,000 maps, 7,800 aerial photographs, 1500 CD-ROMs, as well as atlases, journals, globes, map reference materials, tourist information and monographs. The information concerns cartography, history of cartography, computerized cartography, map and imagery interpretation, remote sensing and GIS. The library provides service to the faculty, students, and staff of Clark University, as well as the general public. Resources can now be found in the Goddard Library.

Clark Labs

Since 1987, <u>Clark Labs</u> has been developing the TerrSet GIS and Image Processing software which professionals use in a wide range of industries in more than 180 countries. Many students find part-time employment at Clark Labs.

Geography Newsletters

The department releases digital newsletters. Each feature highlights past events and announces upcoming events. These newsletters compile updates from departmental faculty, doctoral

| students, graduate students, undergraduate students, alumni, and staff. Newsletters are available in our <u>digital archive</u> . | | |
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FORMS

This section has forms. Most of these forms are kept for departmental records, but some of them must be submitted to the Registrar's office, etc. All forms below are required unless otherwise noted.

MAJOR DECLARATION FORM

This form is used when you are ready to formally declare a major, minor, or concentration. In Geography, if you plan to declare the major, you will need to have a faculty advisor in the department. If you have questions about this or need help finding a faculty advisor, contact the <u>Administrator of Degree Programs</u>. If you plan to declare a Geography minor, you are required to have a Geography faculty advisor.

Once you have obtained your faculty advisor's approval, return this completed form to the Administrator of Degree Programs, who will keep a copy for departmental records and then will send it to the Registrar's Office to be processed.

This form is on the Registrar's Website, or you can pick one up in the Geography office.

Return to: Administrator of Degree Programs

CAPSTONE FORM (REQUIRED FOR MAJORS ONLY)

This form is to notify the department of your plans to satisfy the capstone requirement. You must have this form signed twice: once before registering for the credit that will satisfy this requirement, and again before the last day of the semester in which the credit is completed.

Must be completed by: This form must be completed before registering for the capstone, and then a second time before the last day of the semester in which the credit is completed.

RESEARCH/INTERNSHIP CREDIT APPROVAL FORMS (OPTIONAL)

These forms are used if you plan to pursue an internship or research opportunity for academic credit e.g. to satisfy a capstone requirement. The first step is to read the <u>Academic Credit Internship Program Description</u>, then fill out the Academic Internship Application online. Next, you will download the following forms from the <u>Career Connections Center</u> website and complete them by the deadline listed: Internship Supervisor Agreement Form, Policies and Procedures Agreement Form, Signatures sheet, and internship timesheet.

Must be completed by: Deadline set on <u>Career Connections Center</u> website

Return to: Career Connections Center

PETITION TO REPLACE A GEOGRAPHY REQUIREMENT (OPTIONAL)

This optional form is necessary only if you plan to petition to include a non-geography course in your geography curriculum. Some examples of when this request would be appropriate are:

- 1) if you took a course through another academic department that you would like to count towards a specific geography requirement
- 2) if you are a double major and you took a course that overlaps with a required geography course (i.e. research methods)

This form must be signed by your faculty advisor and the Chair of the Undergraduate Studies Committee. It is preferable that you complete this form before enrolling in the non-geography course.

Return to: Administrator of Degree Programs

CHANGE OF ADVISOR FORM (OPTIONAL)

This optional form is necessary only if you wish to switch to a new faculty advisor within the geography department. This form can be found on the <u>Academic Advising Website</u>, or you can pick one up in the Geography office.

Return to: Administrator of Degree Programs

CAPSTONE FORM

This form is meant to stay in departmental electronic files, but may be forwarded to the Registrar's Office for confirmation of the credit. Blank Capstone forms can also be downloaded online or picked up in the Geography Main Office (Jefferson 220).

PETITION TO REPLACE GEOGRAPHY REQUIREMENT

The Chair of the Undergraduate Studies Committee, in agreement with the student's faculty advisor, may approve a non-Geography course to count toward a Geography major or minor requirement. Transfer and study abroad credits must be pre-approved by Academic Advising or the Study Abroad office. Students may be asked to submit materials such as course syllabi or a letter from an advisor/instructor for consideration. Please submit this signed form to the Administrator of Degree Programs. This form will be kept on file with student's Major/Minor Worksheet.

| STUDENT NAME: | ID NUMBER: |
|--|---|
| FACULTY ADVISOR: | |
| COURSE SUBSTITUTION: Check the box if supporting n | naterials are attached |
| NUMBER & TITLE OF PROPOSED NON-GEOGRAPHY RE | PLACEMENT COURSE: |
| INSTRUCTOR NAME: | DEPARTMENT: |
| PETITION TO REPLACE THE FOLLOWING REQUIREMENT | т: |
| Core Course, specify core as HE; UE; ESS; _ | _ GIS |
| Skills Course | |
| Research Methods Course | |
| Elective Course, specify level as 00; 100; or | 200 |
| REASON FOR PETITION: | |
| Please check this box if the non-Geography cours major or 7 course credits toward the minor. | se will count as one of the 11 course credits towards the |
| Student Signature: | Date:// |
| (This section to be completed by department faculty) | |
| Faculty Advisor Signature: | Date:/ |
| USC Chair Signature: | Date:/ |
| Course to fulfill GEOG requirement | Course to count as GEOG course credit |
| APPROVED DENIED | APPROVED DENIED |



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Cover Image by Mio Sallanto

"Geography nurtures a unique way of seeing our world. It bridges science and social science, the physical and human worlds, the local and global, the verbal and visual, the quantitative and qualitative. Maybe that's why so many professionals I meet say that if they could do it over again, they'd study geography."

Anthony Bebbington, Professor, Graduate School of Geography